MacBook Pro 13" Function Keys 2017 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 non-Touch Bar MacBook Pro (13-inch, 2017, Two Thunderbolt 3 ports).

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.

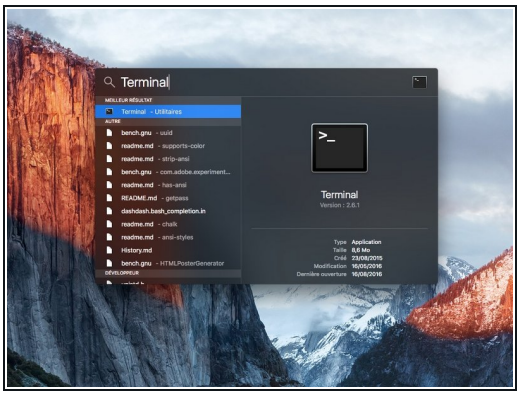
TOOLS:

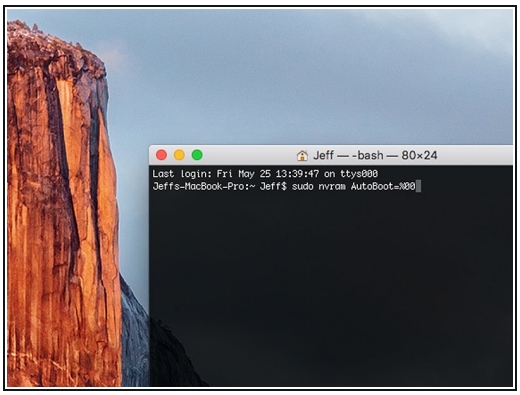
- P5 Pentalobe Screwdriver Retina MacBook Pro and Air (1)
- Suction Handle (1)
- iFixit Opening Picks (Set of 6) (1)
- Tweezers (1)
- Spudger (1)
- T5 Torx Screwdriver (1)
- T3 Torx Screwdriver (1)
- Torx 8 T8 screwdriver (1)
- P2 Pentalobe Screwdriver iPhone (1)

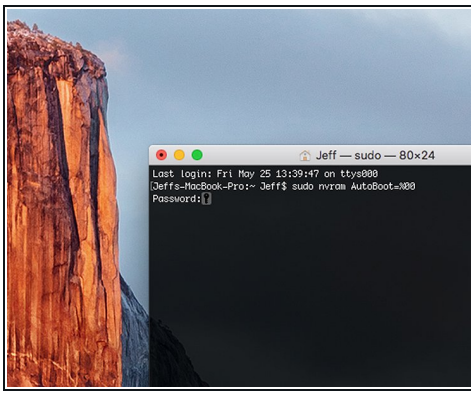
PARTS:

- MacBook Pro 13" Retina (Late 2016-2017) Display Assembly (1)
- MacBook Pro 13" Retina (A1708, A2159) Display Cable (1)
- Display Assembly Compatible with MacBook Pro 13" (Late 2016-2017) (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:

- **sudo nvram AutoBoot=%03**

Step 2 — Lower Case



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
  - 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.

ⓘ 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.

  ⚠ This may require a lot of force.

Step 8



- Remove the lower case.

Step 9 — 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.

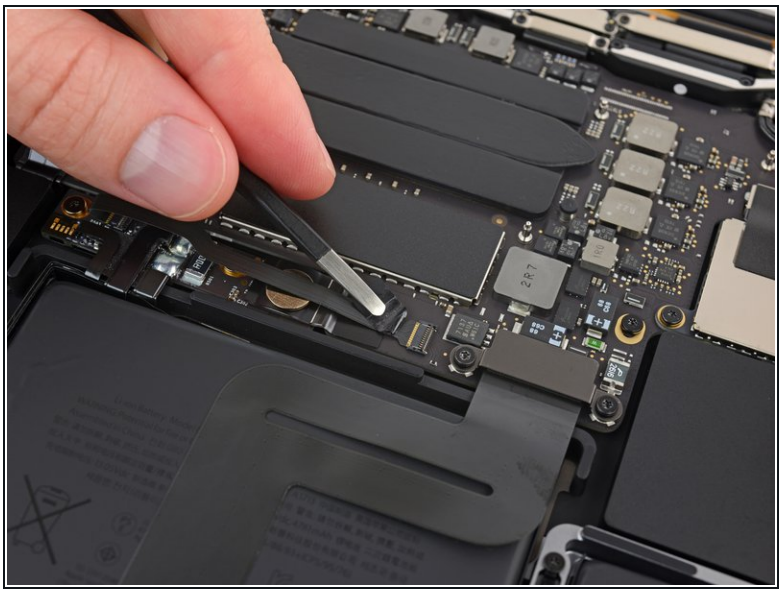
  ⓘ The tape is integrated into the ribbon cable and will not detach completely. Simply peel it back enough to access the connector.

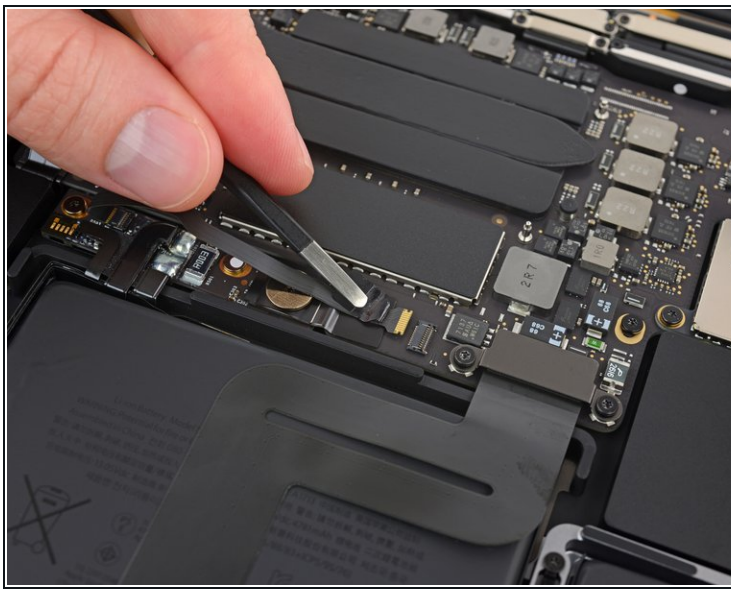
Step 11




- 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.

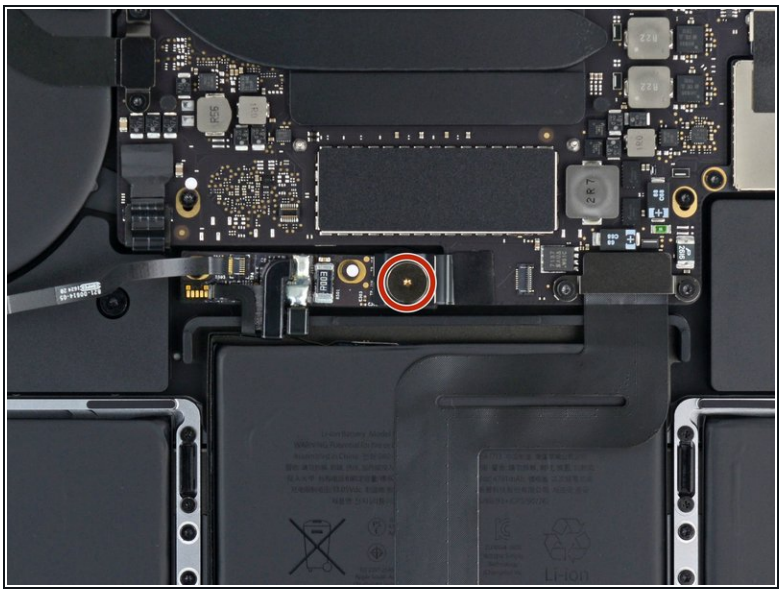
Step 13

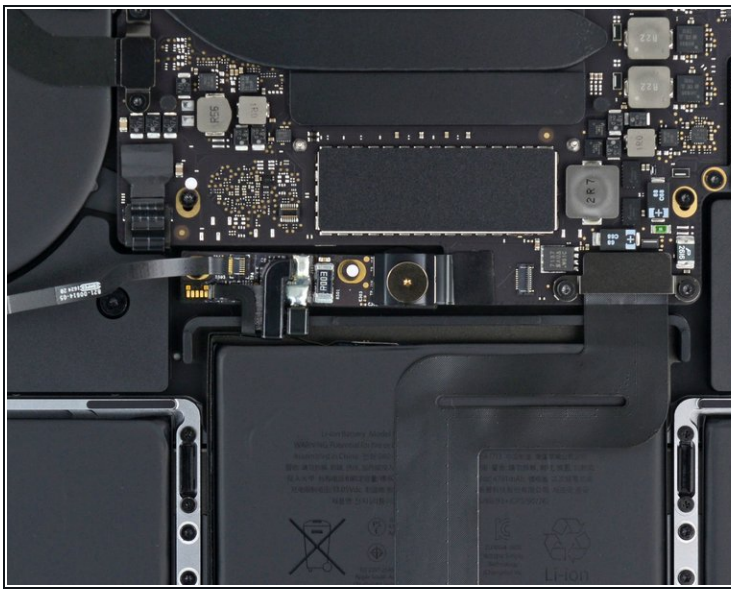


- Fold the battery board data cable back and out of the way.

If you're replacing your battery, you may need to completely remove and transfer this cable to your new battery. Disconnect both ends and carefully remove the cable. During installation, be careful not to install it upside-down or backwards—note the orientation in the photos.

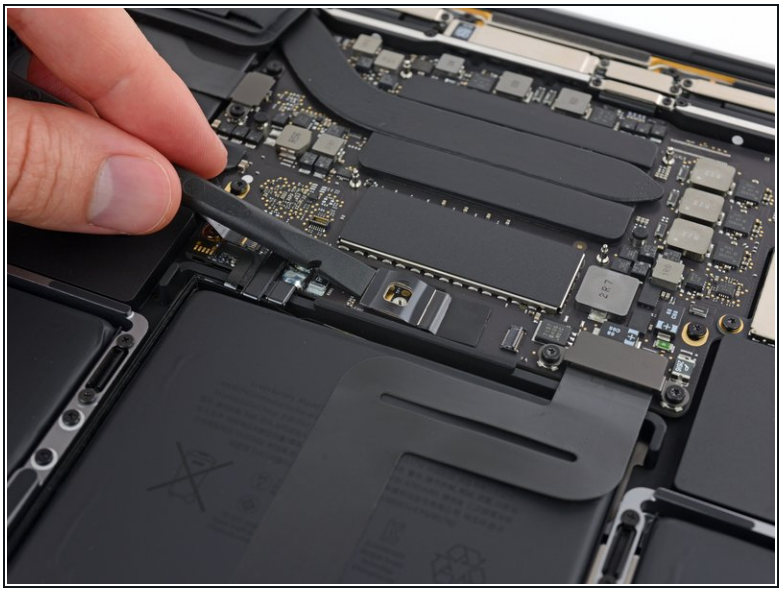
Step 14





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

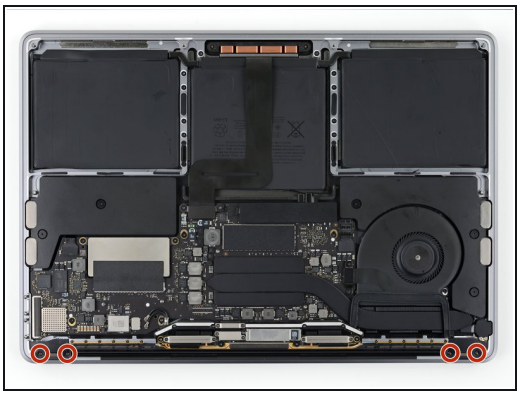
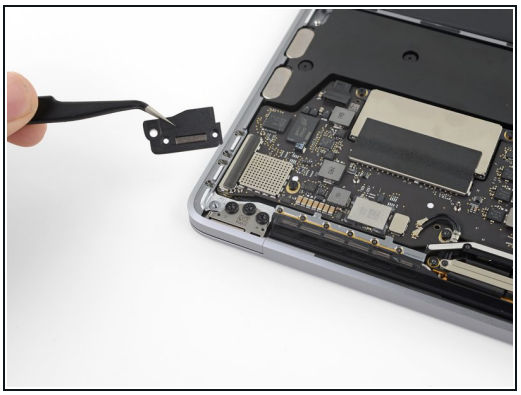
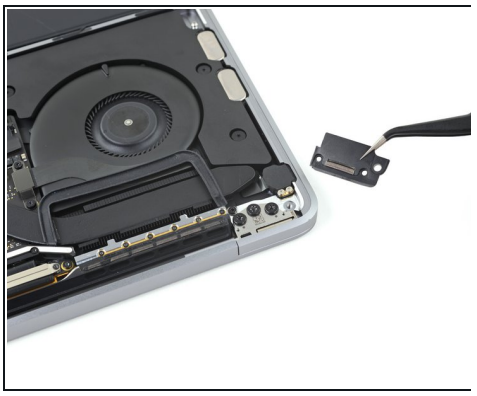
Step 15





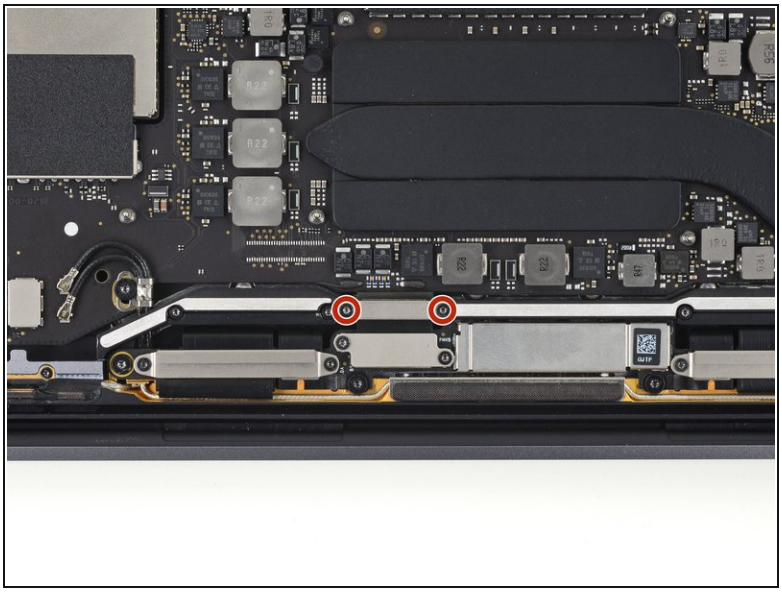
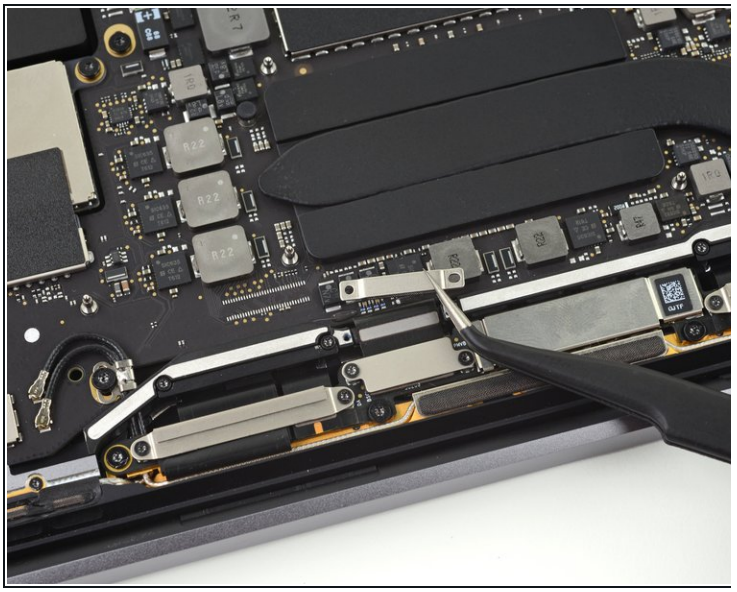
- Use a spudger to gently lift the battery power connector, disconnecting the battery.
  - Lift the connector high enough so that it stays separated from its socket. If it accidentally makes contact during the course of your repair, it could damage your MacBook Pro.

Step 16 — Remove the hinge covers

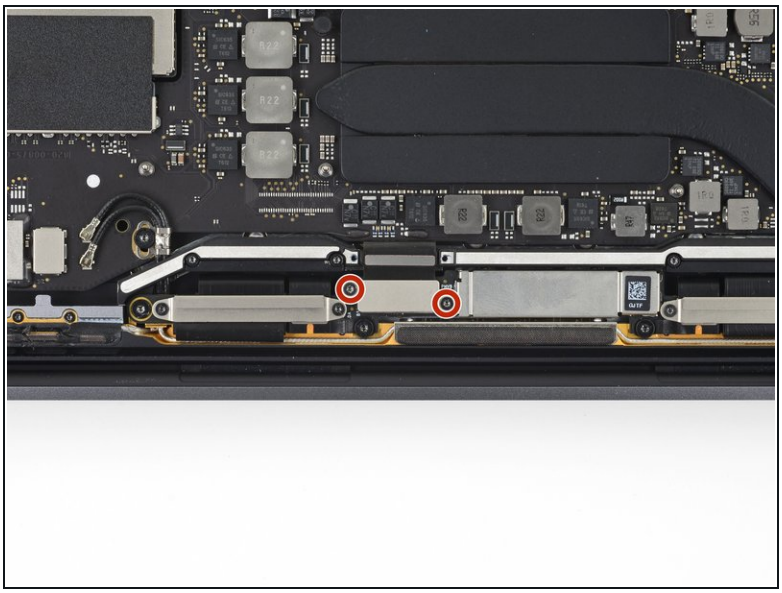
- Remove the four 1.9 mm T3 Torx screws securing the plastic covers on top of the display hinges.
- Remove both plastic hinge covers.

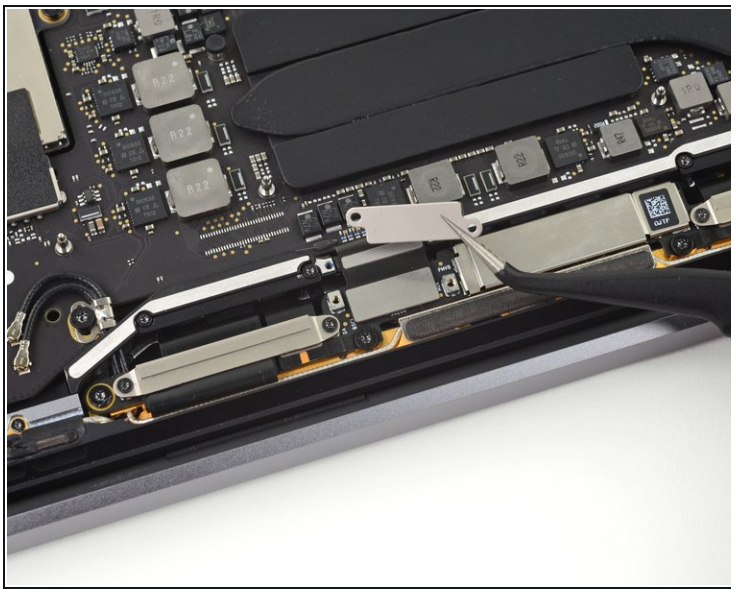
Step 17 — Disconnect the main display cable

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

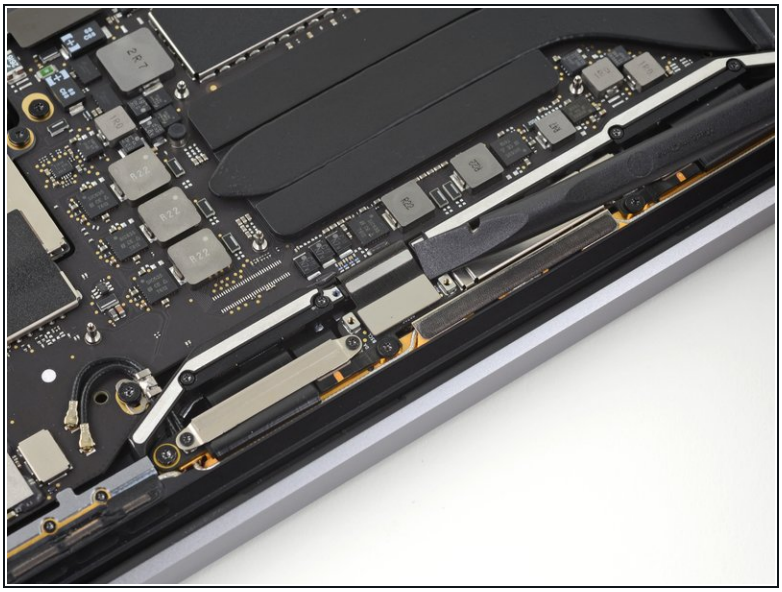
Step 18

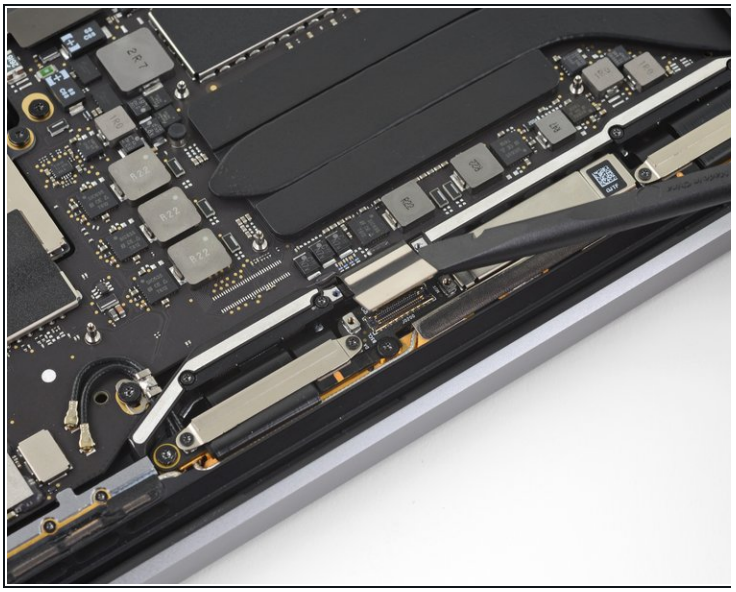




- Remove the two 1.7 mm T3 Torx screws securing the aluminum cover on top of the display cable flex connector.
- Remove the cover.

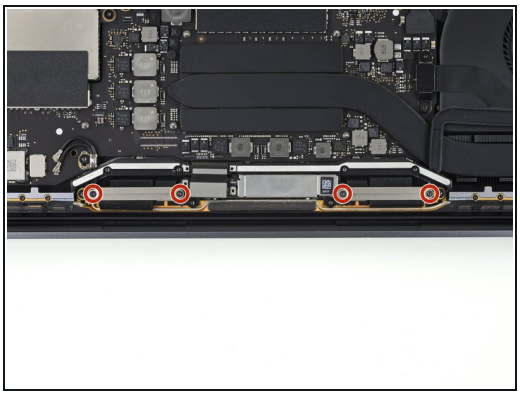
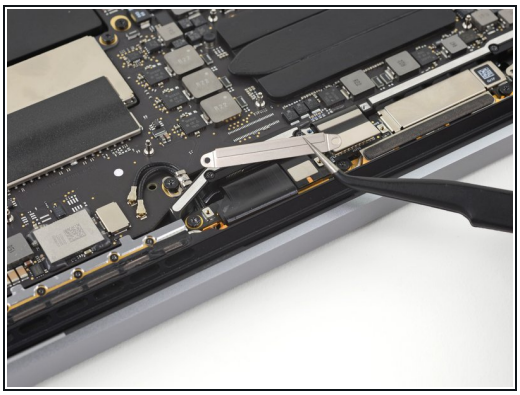
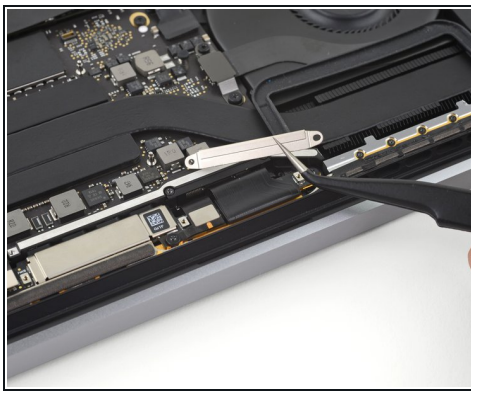
Step 19





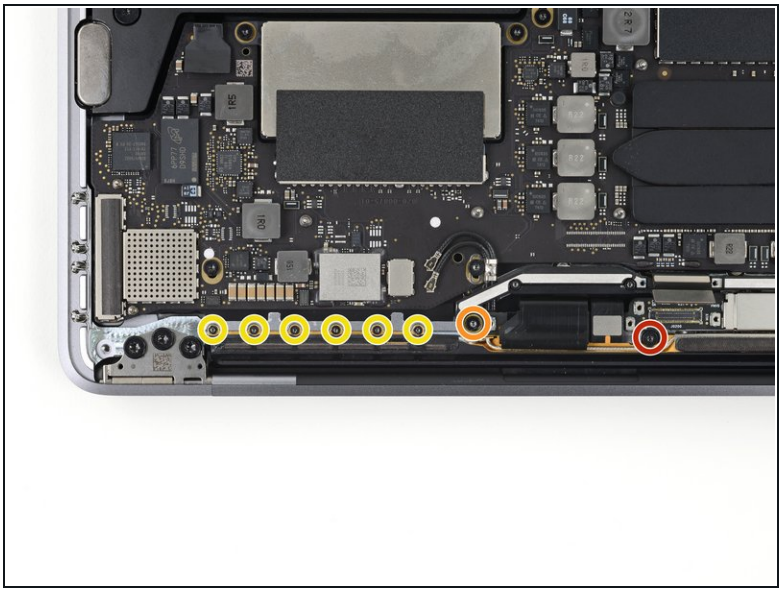
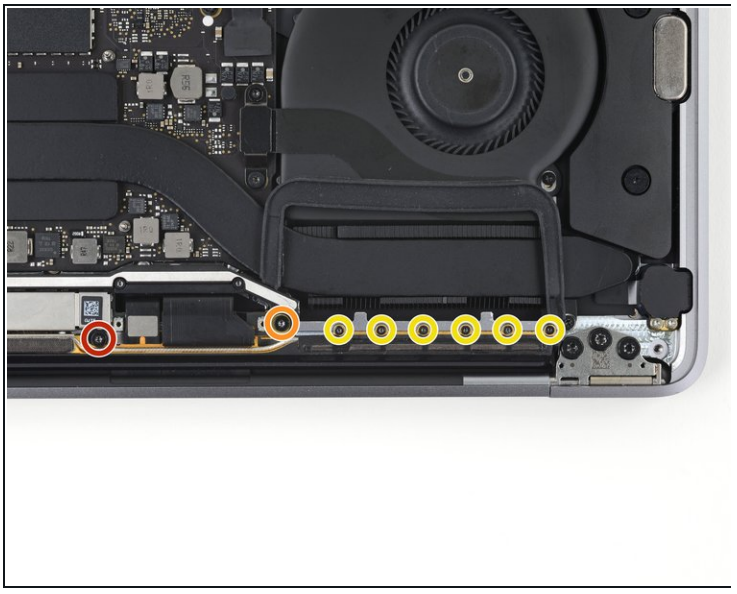
- Pry the display board flex cable straight up from its socket to disconnect it from the display board.

Step 20 — Unscrew the display cable covers

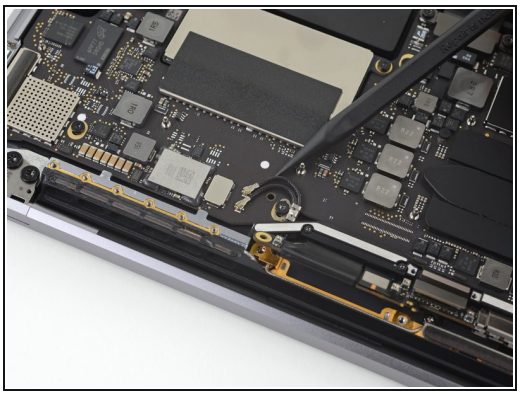
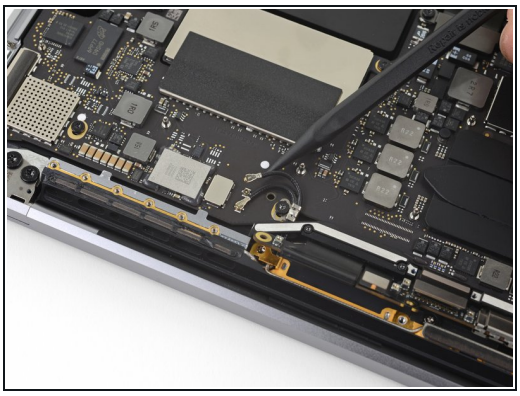
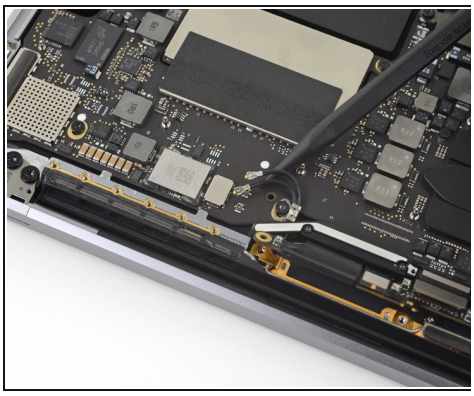
- Remove the four 1.5 mm T3 Torx screws securing the two aluminum covers on top of the two display cables.
- Use a pair of tweezers to remove the two aluminium covers.

Step 21 — Unscrew the antenna assembly

- Remove the two 3.3 mm T5 Torx screws (one from each side) securing the antenna cable assembly.
- Also remove the two 4.1 mm T5 Torx screws (one from each side).
- Remove the twelve 1.1 mm P2 pentalobe screws (six from each side) securing the rest of the antenna cable assembly.

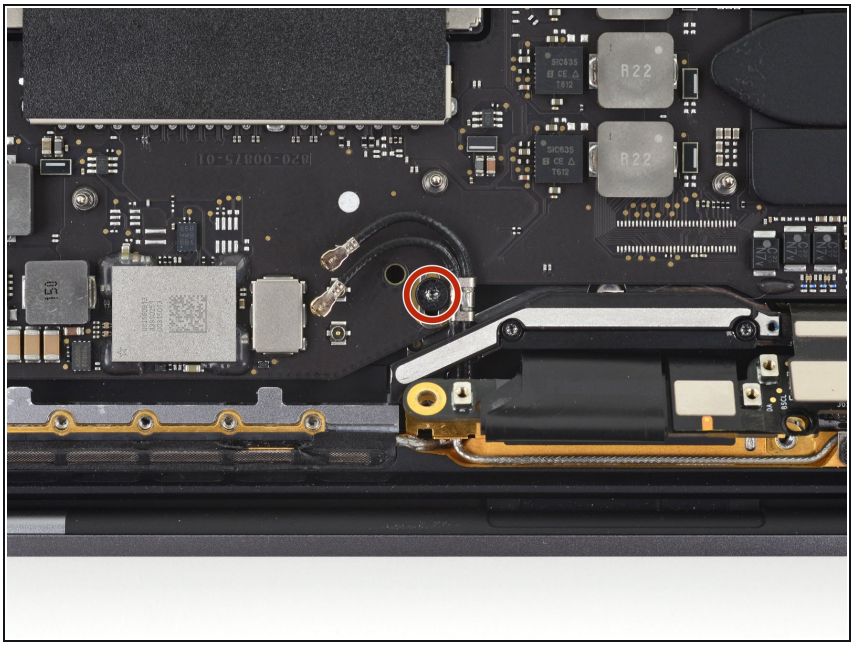
Step 22 — Disconnect the antennas

- Carefully disconnect the two antenna coax cables by prying them **straight up** from the logic board.
  - Slide your tweezers or spudger underneath each cable until it's near the socket, and then gently twist or pry up to disconnect it.

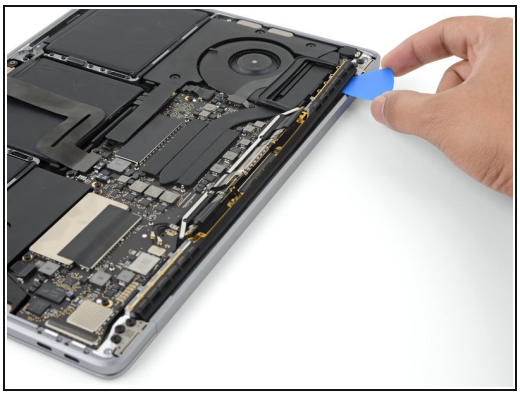
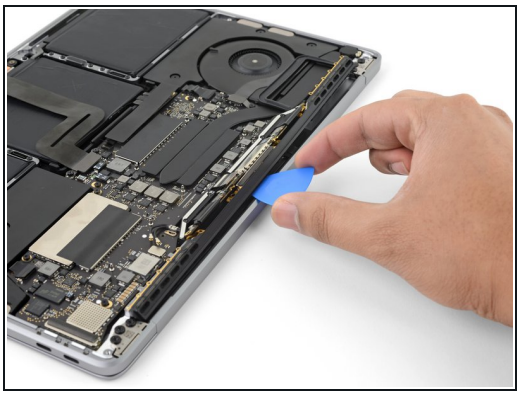
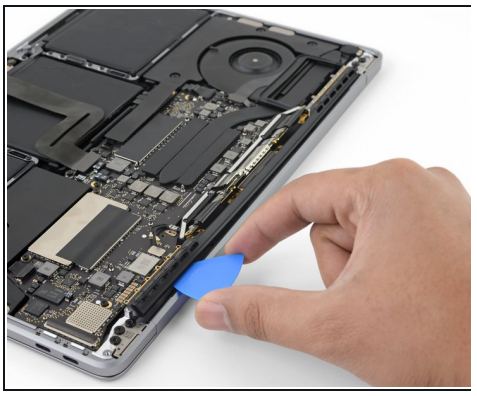
To reconnect each cable, align the connector directly over its socket, and then press down so it snaps into place.

Step 23



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

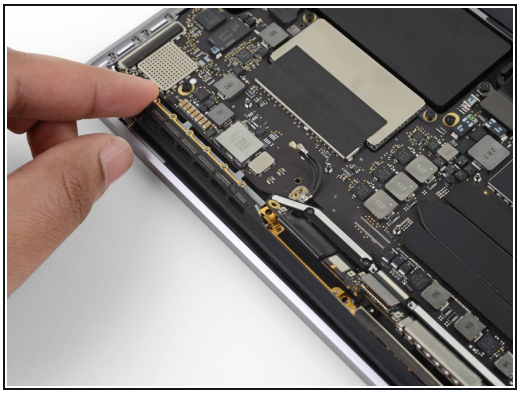
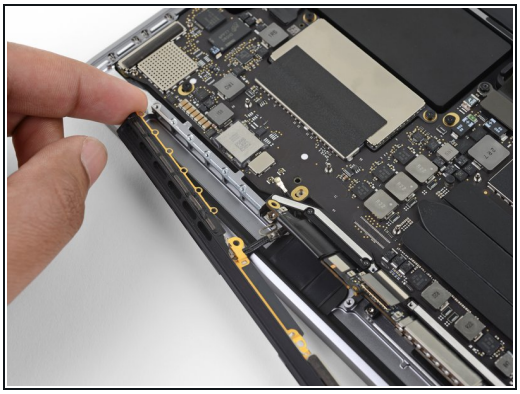
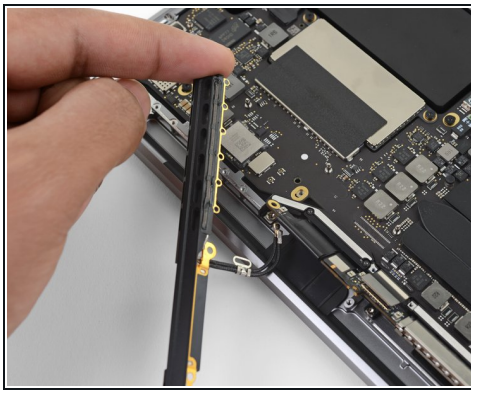
Step 24 — Unseat the antenna assembly

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

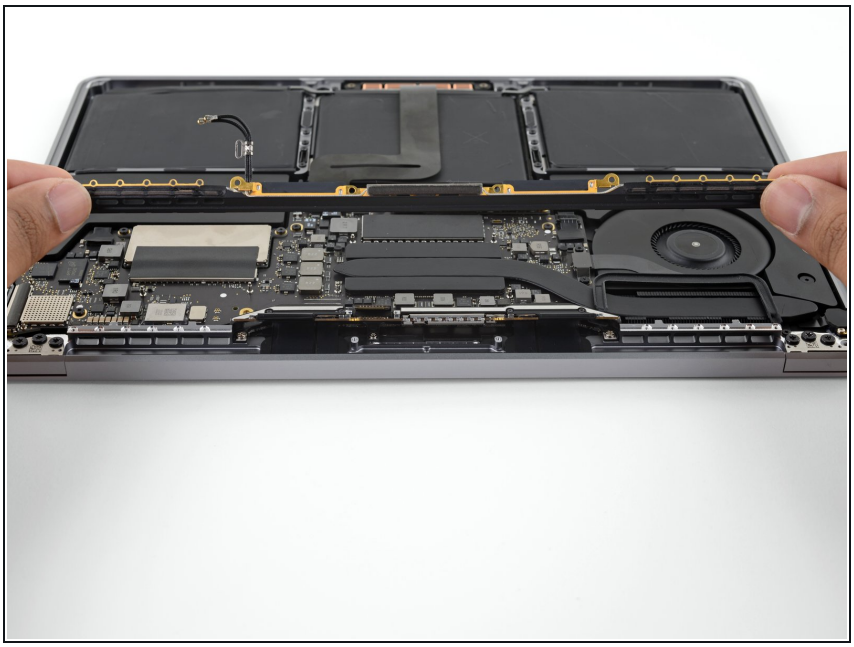
⚠ Don't slide the opening pick from side to side, as there are two display cables in the way that may be damaged.

Step 25 — Remove the antenna assembly

- Carefully remove the antenna assembly, while simultaneously feeding the antenna cable bundle through the hole in the chassis.

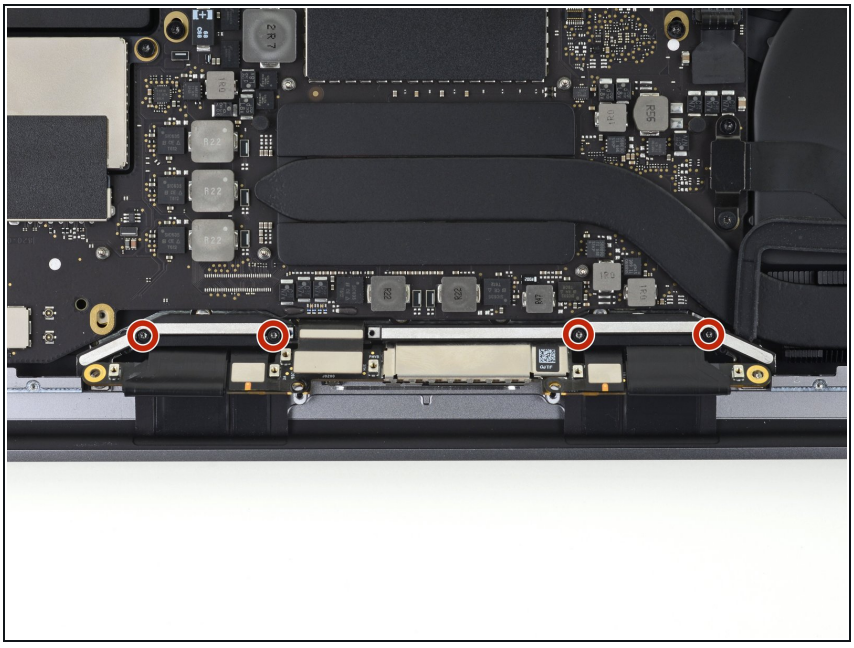
Step 26



- Remove the antenna cable assembly.

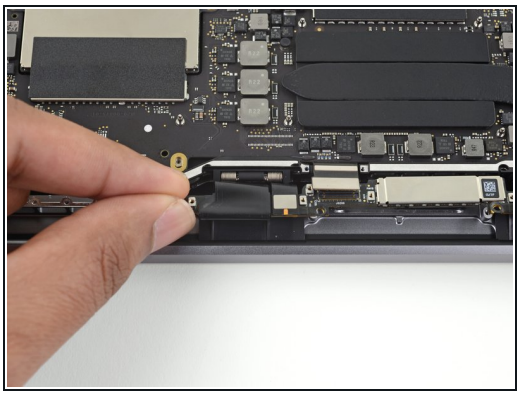
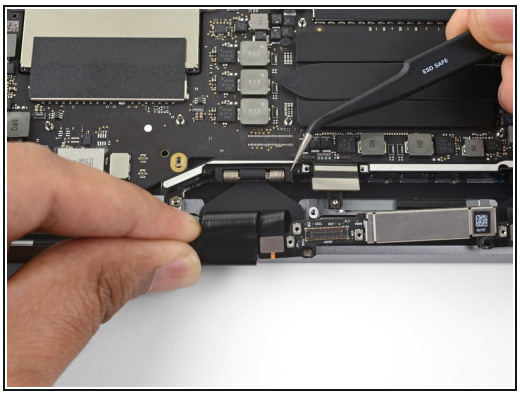
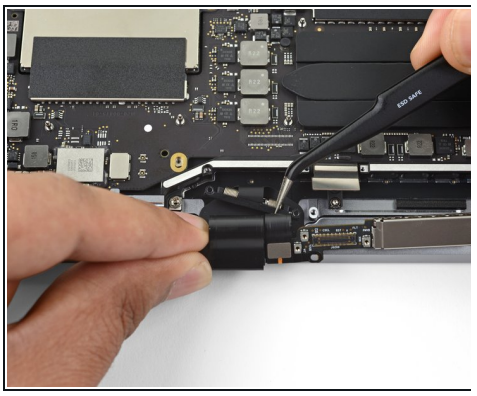
During reassembly, gently pinch the cable bundle together and guide through the hole in the chassis into the correct position on the board. If needed, use your tools to help guide it through, but don't force it.

Step 27 — Unscrew the display cable assembly



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

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 on the display cable out of its recess.
- Repeat this step with the right cover spring.

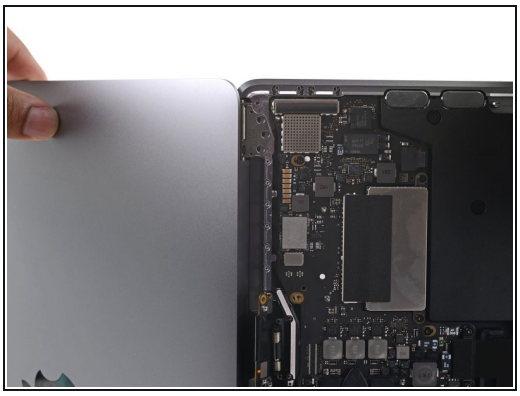
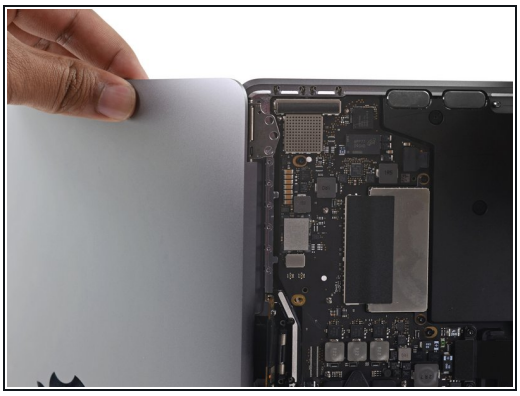
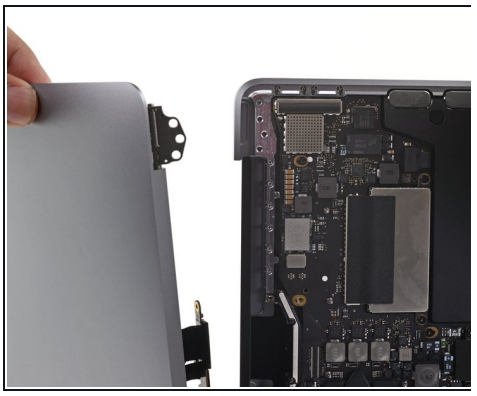
Step 29 — Unscrew the hinge bolts




ⓘ Fully open the screen and stand your MacBook Pro up on one side.

- While steadying the MacBook pro with your free hand, remove the three T8 Torx screws from the lower display hinge.
- Remove the remaining three T8 Torx screws from the upper display bracket.

Step 30 — Remove the display assembly

⚠ 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 hinge brackets 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.
- Remove the display/screen assembly, being careful not to snag it on any cables.

During reassembly, ensure the display cable assembly lies on the correct side of the main body before refastening the hinge bolts.

Be sure to confirm that both connectors on either side of the display cable assembly are fully seated, as these may have come loose during the disassembly process.

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.