Retina MacBook 2017 USB-C Port Replacement

Replace a loose, worn, or failed USB-C port in the Retina MacBook 2017.

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INTRODUCTION

The USB-C port on your Retina MacBook 2017 is the only port besides the headphone jack, and may suffer wear or damage over time. Use this guide to replace it.
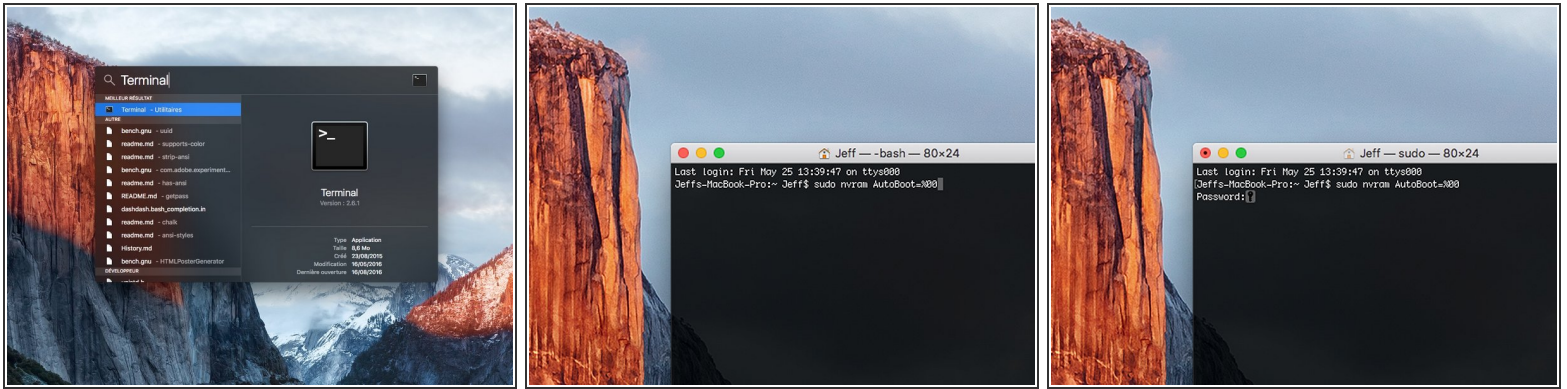
TOOLS:

- P5 Pentalobe Screwdriver Retina MacBook Pro and Air (1)
- Spudger (1)
- Tweezers (1)
- iPad Battery Isolation Pick (1)
- T5 Torx Screwdriver (1)
- Phillips #00 Screwdriver (1)

PARTS:

- MacBook 12" Retina (Early 2016) USB-C Port Assembly (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.

- ● 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**

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Step 2 — Lower Case Assembly Opening

⚠️ Before proceeding, unplug and power down your MacBook. Close the display and lay it on a soft surface, top-side down.

● Remove the following eight screws securing the lower case:

  ● Two 1.8 mm P5 Pentalobe screws

  ● Four 2.9 mm P5 Pentalobe screws

  ● Two 6.1 mm P5 Pentalobe screws

📌 Note the orientation of the screws as you remove them—they need to be reinstalled at a slight angle.

📌 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

- Wedge your fingers between the upper case and the lower case, starting from the rear of the MacBook between the hinges.

⚠ Lift the lower case only slightly to avoid damaging the cables that connect the lower case to the upper case.

- Keeping a firm grip, lift steadily until the lower case separates slightly from the upper case.

ⓘ You may experience a lot of resistance when lifting the lower case. If necessary, slide an opening pick or other ESD-safe pry tool down the side edges of the lower case to pop the two hidden retaining clips free.

📌 During reassembly, to re-engage the clips, press firmly near both side edges of the lower case (near where the pick is inserted in the third image) until you hear the clips snap into place.

Step 4

- While holding the lower case in place, carefully flip the MacBook over so the Apple logo faces up.

Step 5
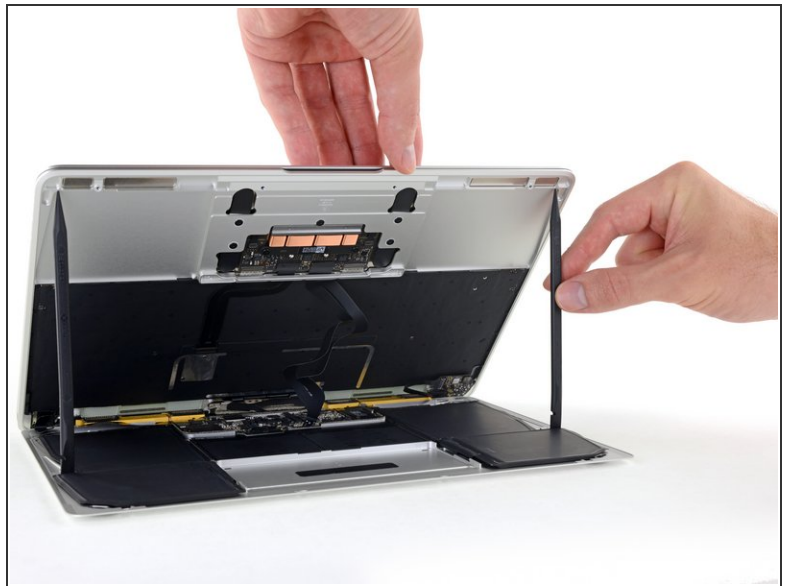
- Lift the upper case and display together from the front edge and raise it to about a 45˚ angle.

- (i) It may be helpful to prop the MacBook open in this position for the next step.

Step 6

- Use the flat end of a spudger to press and hold the small gold 'battery disconnect' button.

  - If the power LED is lit up, continue holding the button until the LED goes dark, and then release. This may take up to 10 seconds.

  - If the LED does not light, release the button after 5-10 seconds. Press and hold it again for 5-10 seconds, and release. Finally, press and hold it a third time for 5-10 seconds, and release.

- (i) This step ensures the MacBook is fully powered down and safe to work on.

Step 7

- Close the MacBook and carefully flip it upside-down.

Step 8

- Lifting from the front edge, open the lower case to an angle of about 45°.
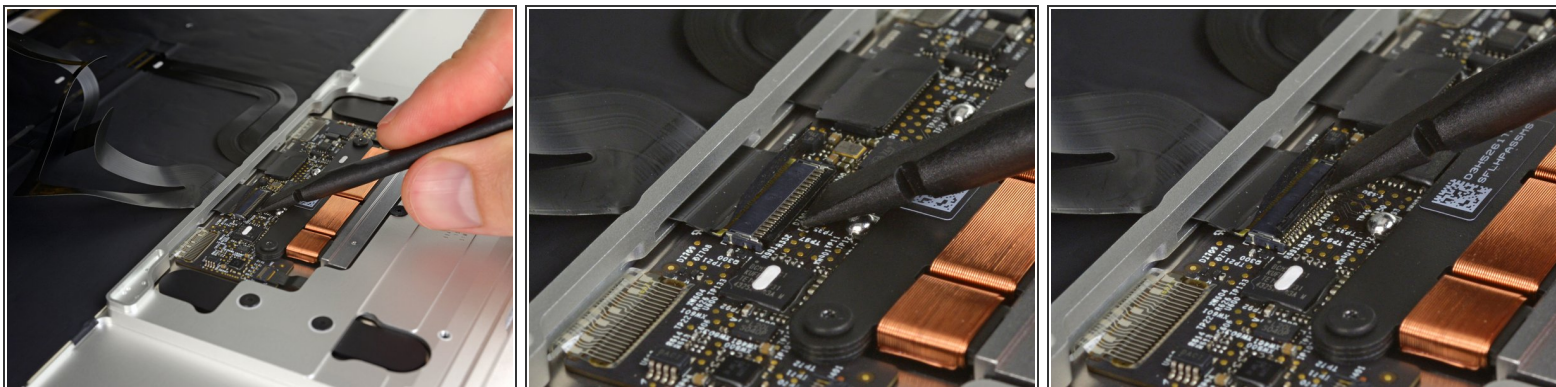
- ⚠️ Take care not to damage the ribbon cables that still attach the lower case to the MacBook.
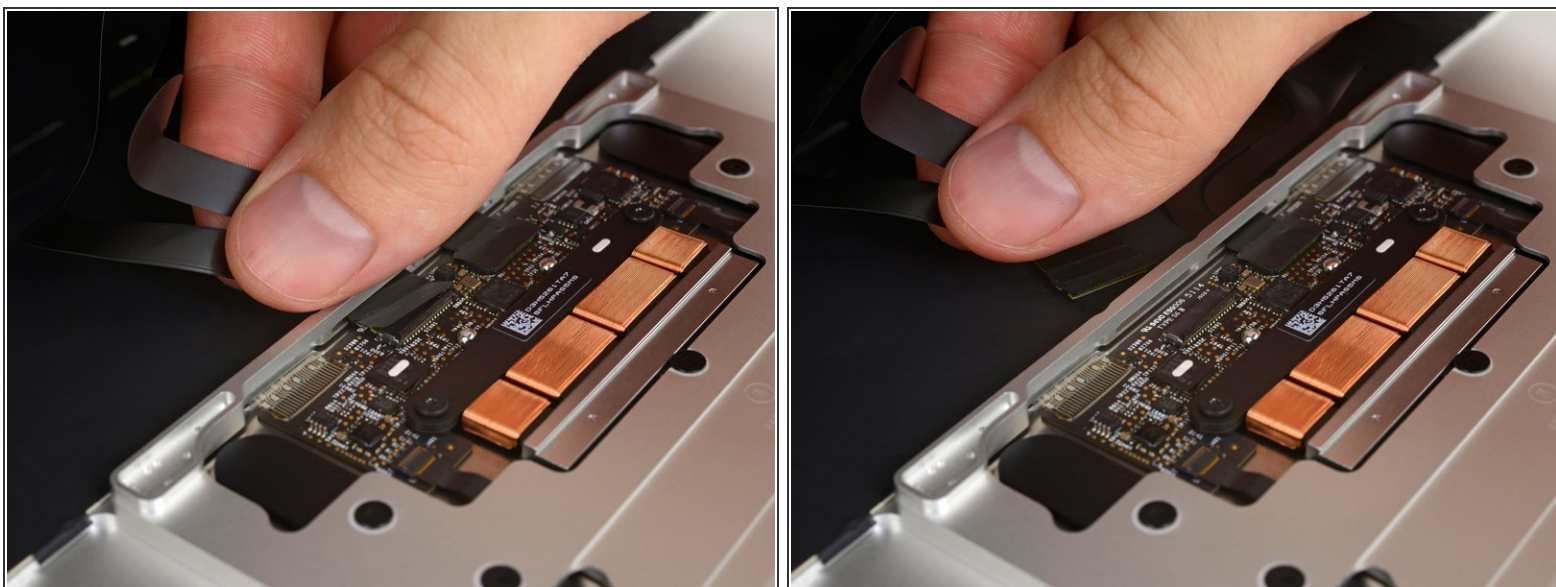
Step 9
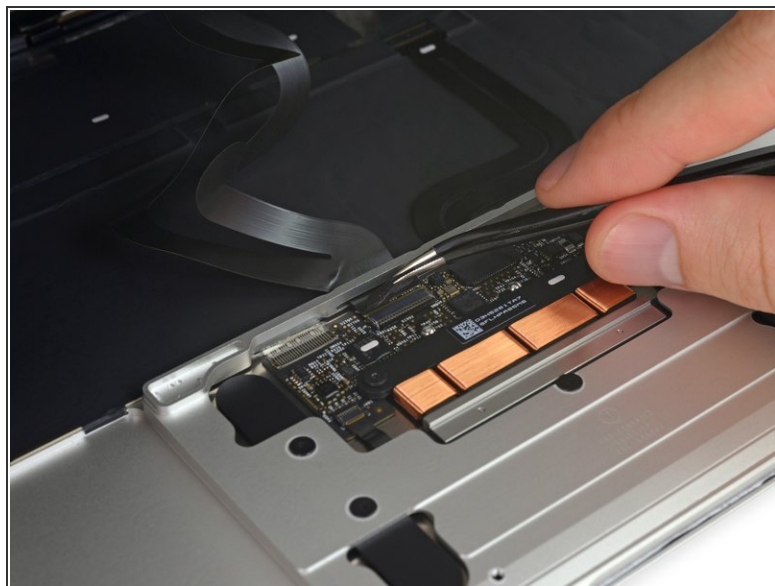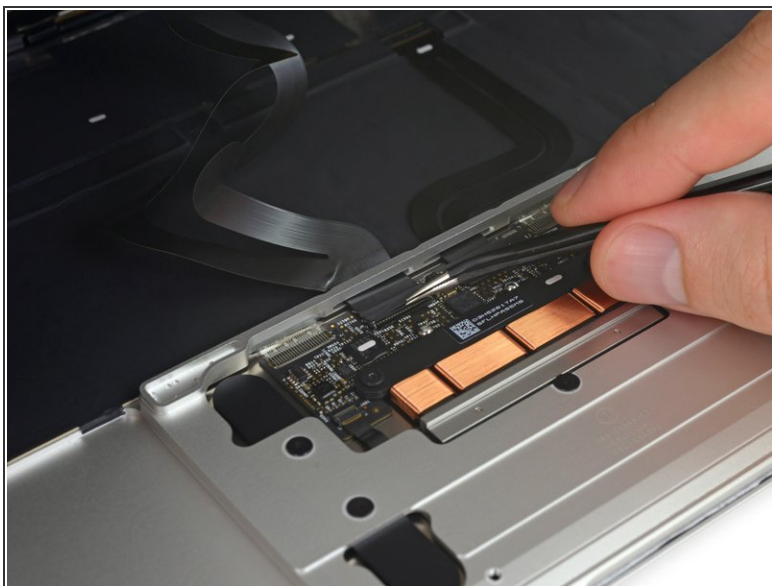
- Use tweezers to peel back the tape covering the trackpad cable ZIF connector.

Step 10

- Use a spudger to carefully flip up the retaining flap on the trackpad cable ZIF connector.

Step 11

- Disconnect the trackpad ribbon cable from the trackpad by pulling it gently through its slot in the frame.

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Step 12

- Carefully close the MacBook and flip it over once again, so that the Apple logo faces up.

- Lifting from the front edge, raise the upper case/display assembly to about a 90° angle, and prop it up against something sturdy so you don't have to hold it.

  - Add a piece of tape near the track pad to secure the upper case and prevent accidental movement.
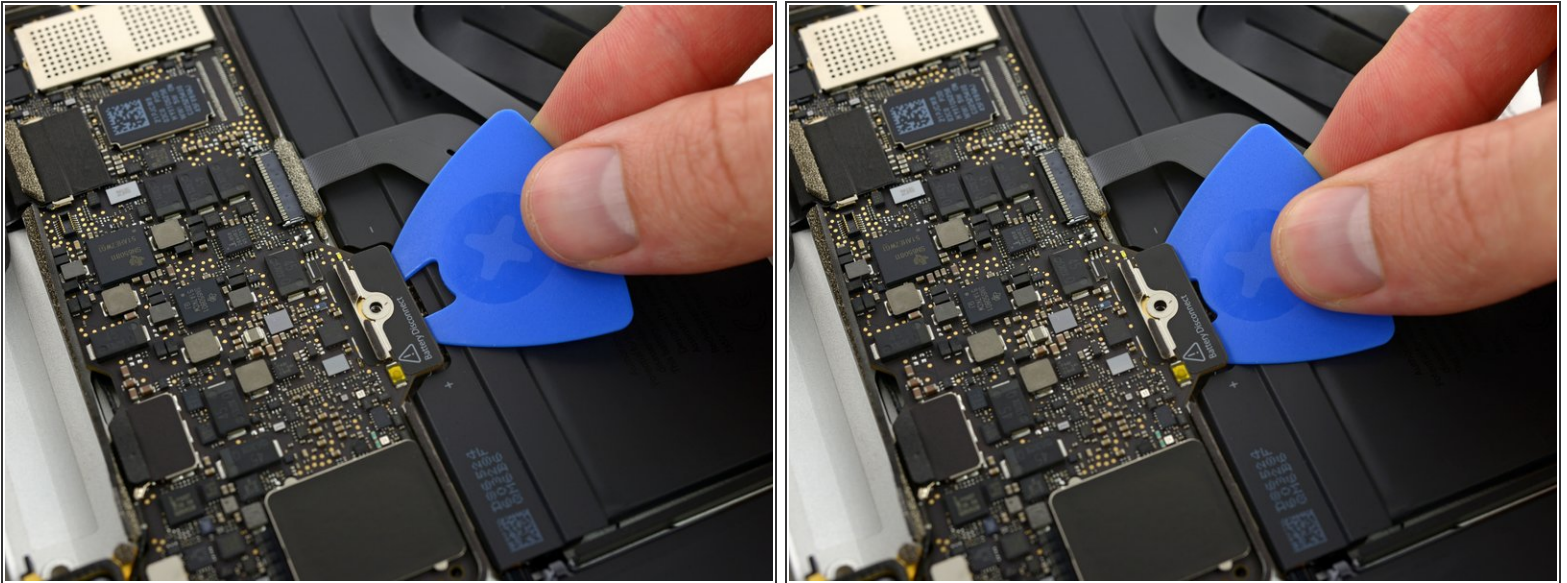
⚠️ It's possible to open the MacBook all the way and lay both sides down flat, but this may damage the flex cables and is not recommended.
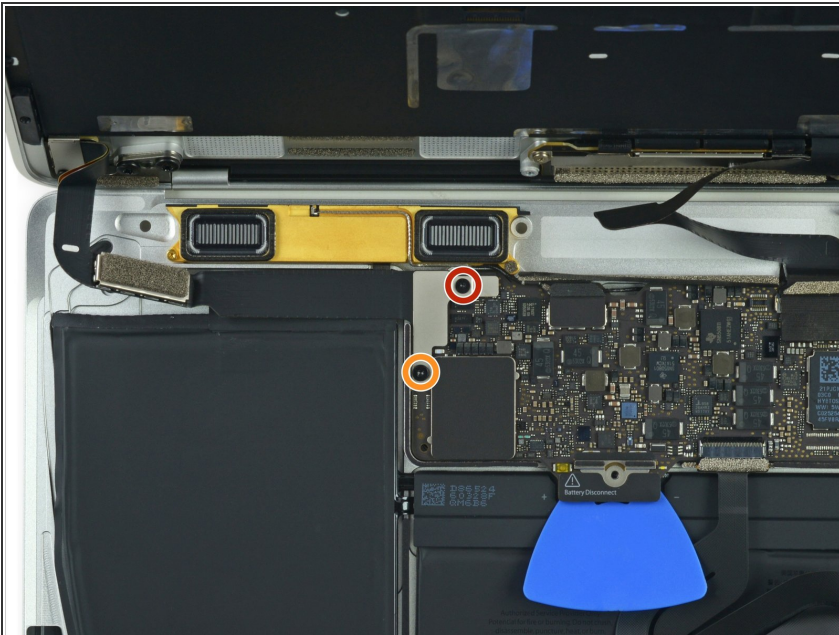
Step 13
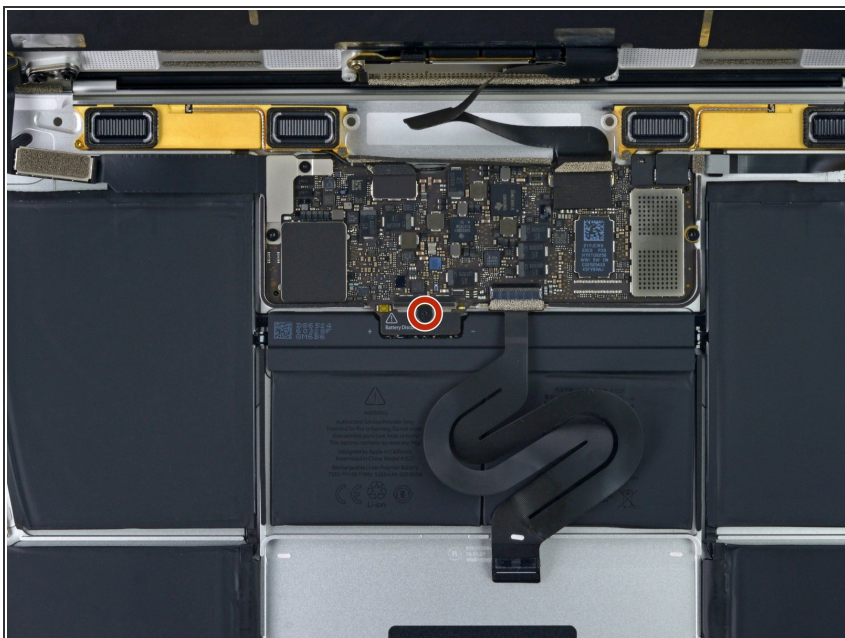
- Remove the single 2.9 mm T5 Torx screw securing the battery connector to the logic board.

Step 14

- As an added precaution, you may physically disconnect the battery by inserting a battery isolation pick between the logic board and the battery connector.

Step 15 — USB-C and Audio Jack Disconnect

- Remove the two screws securing the USB-C port cable bracket:
  - 1.1 mm Phillips #00 screw
  - 3.5 mm T5 Torx screw

Step 16
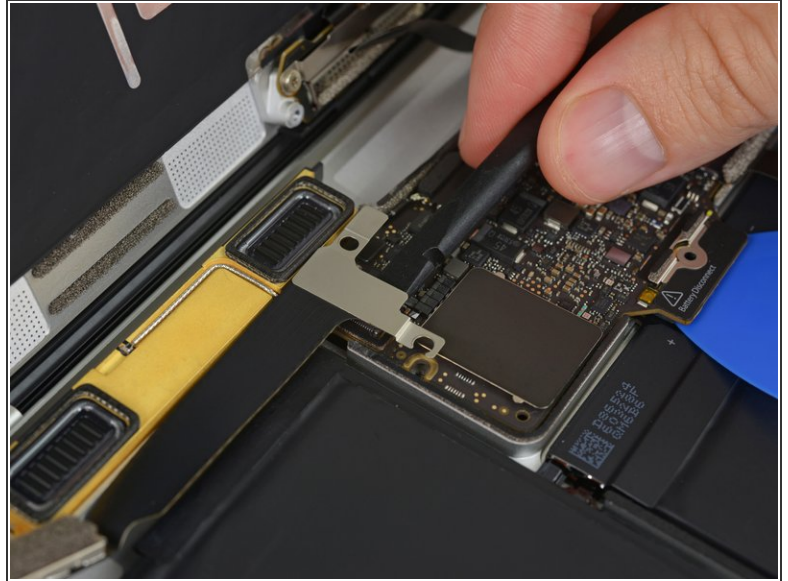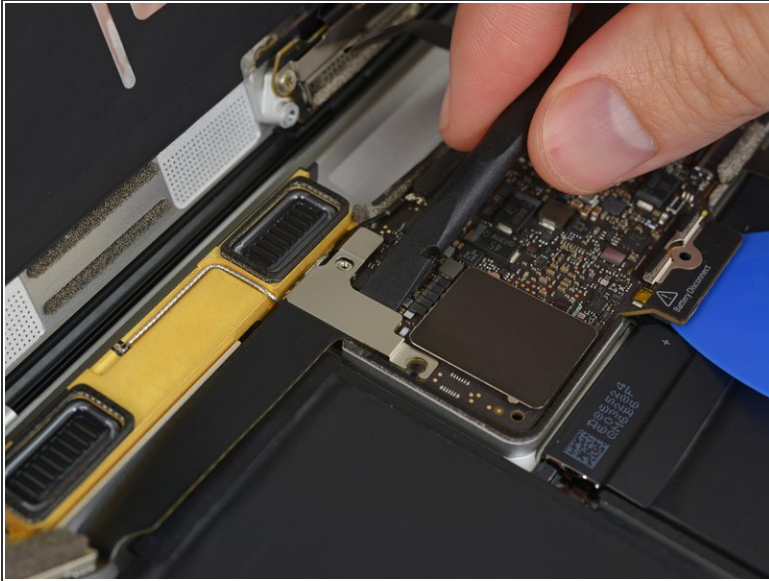
- Use the flat end of a spudger to disconnect the USB-C port cable bracket by prying it straight up from the logic board.

- ⚲ To reconnect this cable, first line up the metal bracket over the screw holes, then press down on the middle of the bracket. Make sure it's aligned correctly, or you may damage the connector.
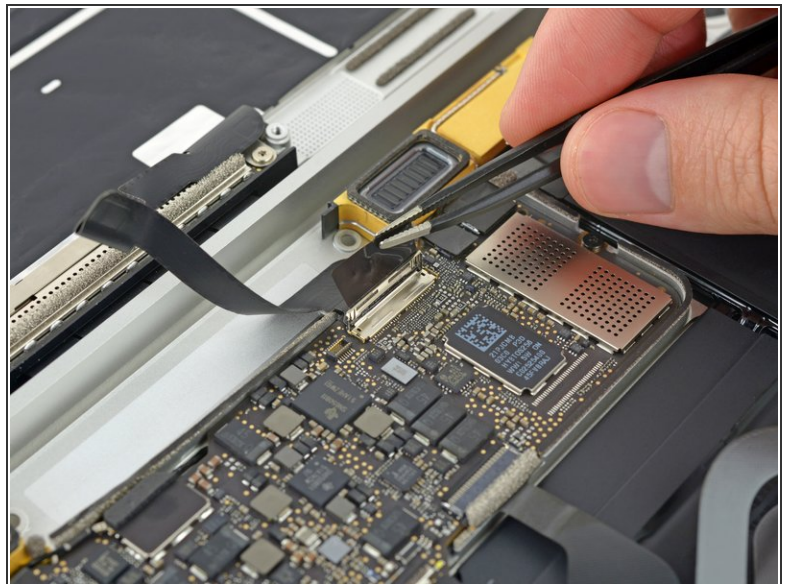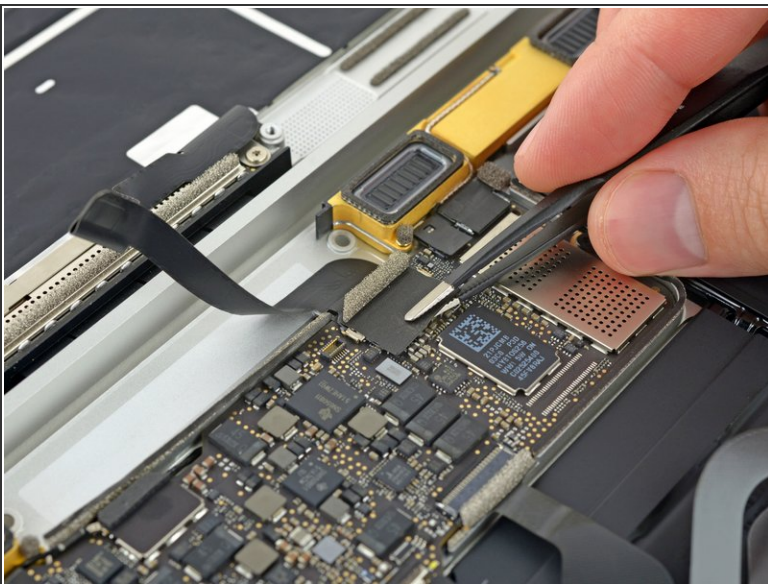
Step 17

- Use a spudger to flip open the retaining flap on the audio jack board cable ZIF connector.

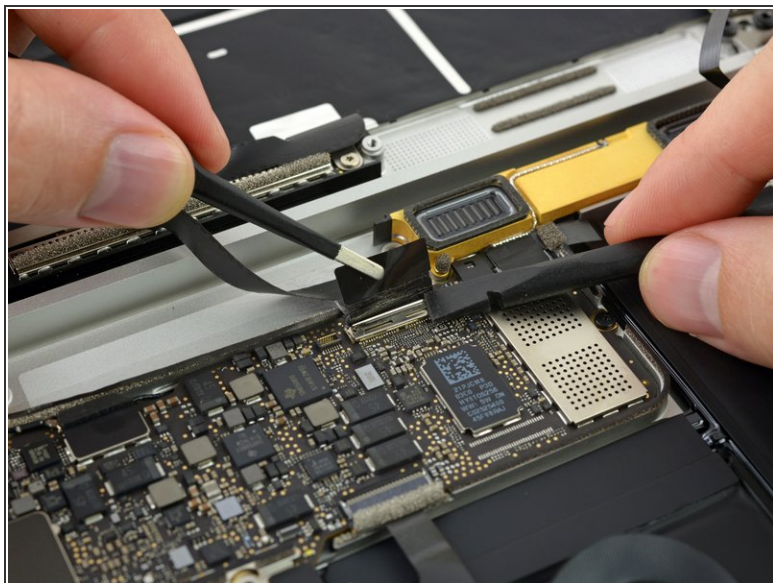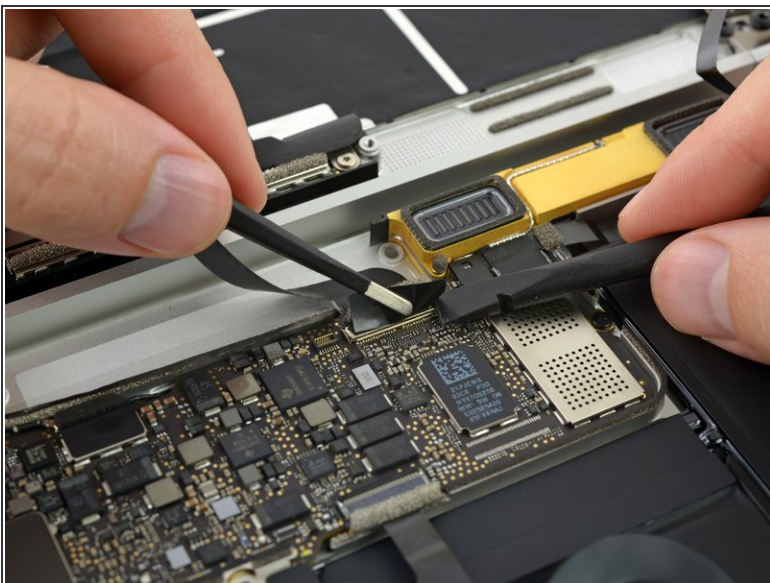This document was generated on 2019-11-16 12:58:28 AM (MST).

Step 18

- Disconnect the audio jack board ribbon cable by pulling it straight back out of the ZIF connector.

- During reassembly, orient the ribbon cable so that the side with the white stripe faces you, as shown.

- At this point it is possible to open the macbook all the way and to lay it flat on a table without causing any damage to the flex cables.

Step 19 — Lower Case Assembly Removal

- Use tweezers to peel back the tape covering the display cable connector.

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Step 20

- (i) It's possible the metal retaining flap on the display cable connector may flip open, remaining stuck to the tape.

  - If so, use the flat end of a spudger to hold down the retaining flap while peeling the tape away with the tweezers.

Step 21
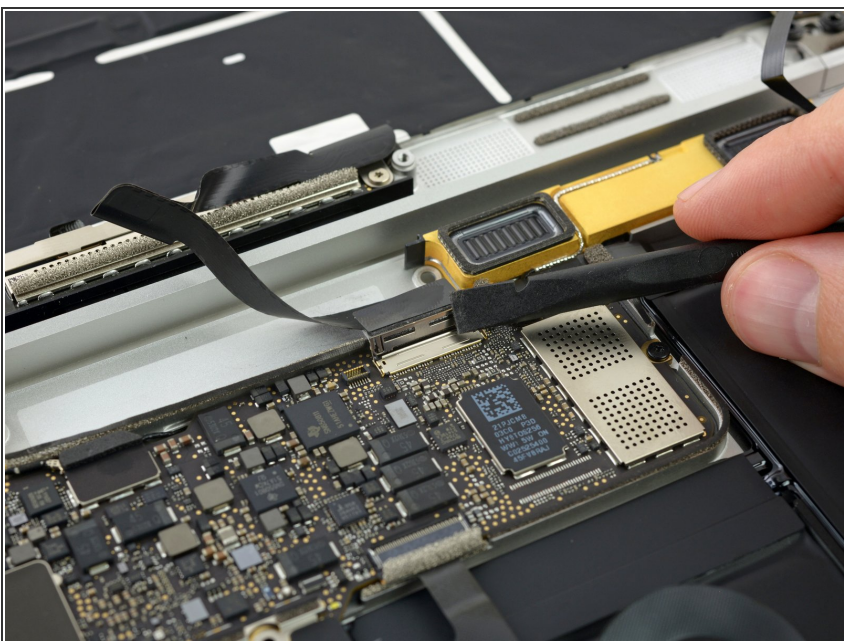
- Use the flat end of a spudger to flip open the retaining flap on the display cable connector.

- Try to keep it clear of the tape, or it may re-adhere and make cable removal difficult.
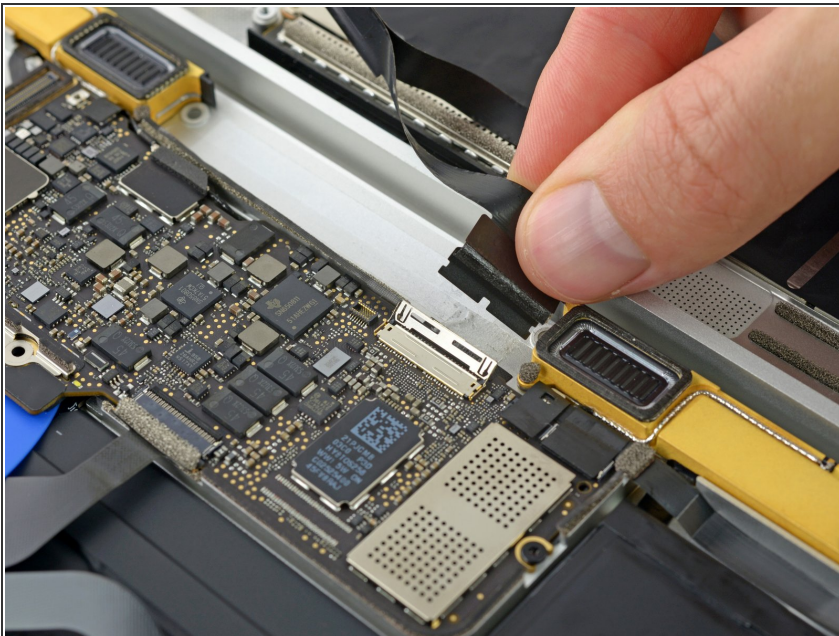
Step 22
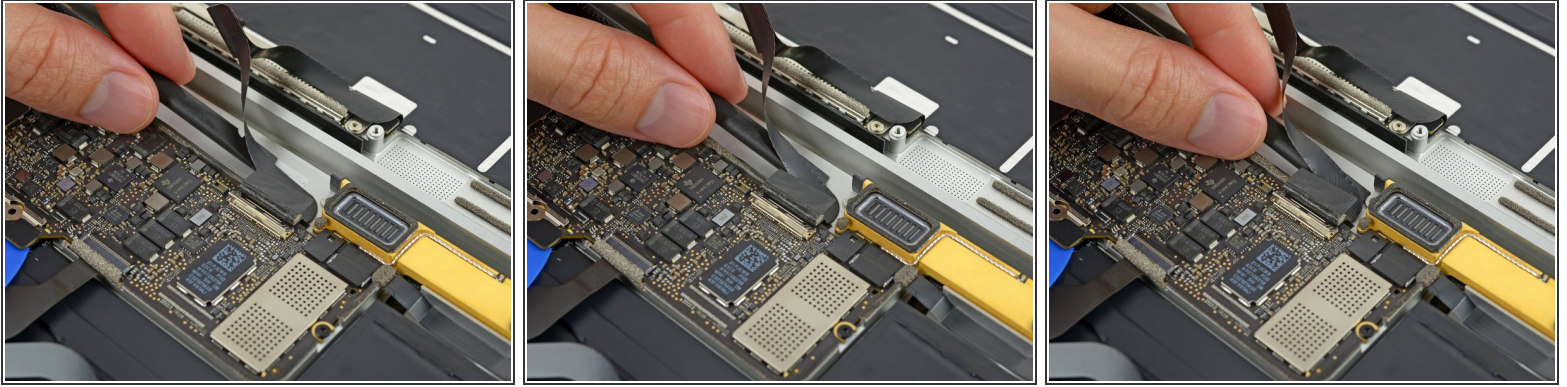
- Carefully slide the flat end of a spudger underneath the display cable to separate the adhesive holding it to the lower case.

  ⚠ Take care not to damage the cable. If the adhesive is very strong, heat the case directly beneath the cable with an [iOpener](#) to soften the adhesive, and then try again.
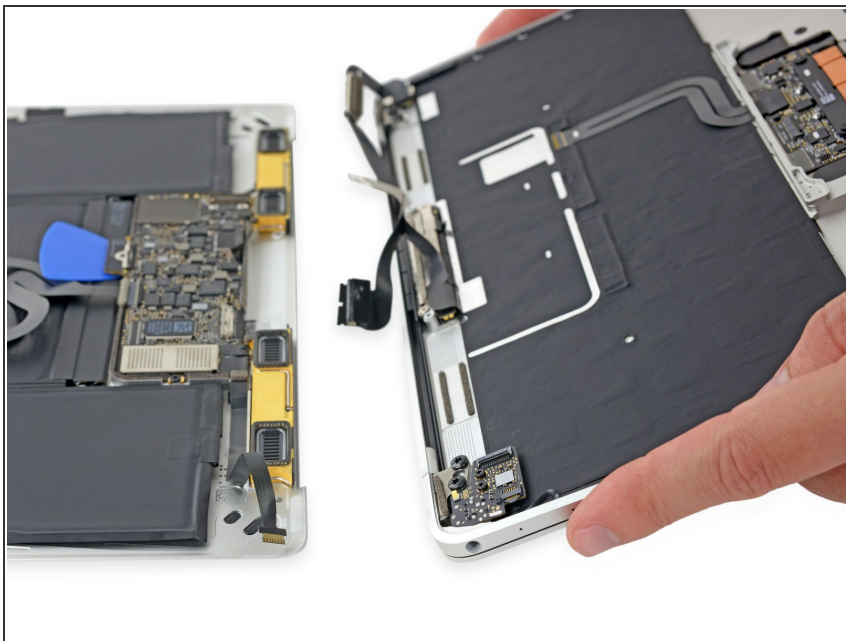
Step 23

- Disconnect the display cable by gently pulling it straight out of its connector.

⚠ Immediately close the retaining flap.

  📌 The flap must remain **closed** when the cable is reinserted during reassembly. Line up the cable with the gold contacts facing down, and gently slide it into the **closed** connector. Take care not to crimp or damage the cable. When fully inserted, the indentations on the sides should not be visible.

Step 24

- Separate the upper case assembly from the lower case assembly.

Step 25 — USB-C Port

- Remove two 2.5 mm Phillips #00 screws securing the USB-C port.

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Step 26

- Use tweezers to lift the USB-C port just over the hinge screws.

- Slide the port out and up over the display hinge to remove it.

⚠ There's very little clearance when removing and installing the USB-C port. If there's not enough room, don't force it. Try removing the display hinge screws and moving the hinges for additional clearance, if necessary.

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