



# Retina MacBook 2017 Trackpad Assembly Replacement

Replace the trackpad assembly on the Retina MacBook 2017.

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## INTRODUCTION

Use this guide to replace the trackpad assembly in your Retina MacBook 2017. This assembly includes the trackpad and the Haptic Engine.

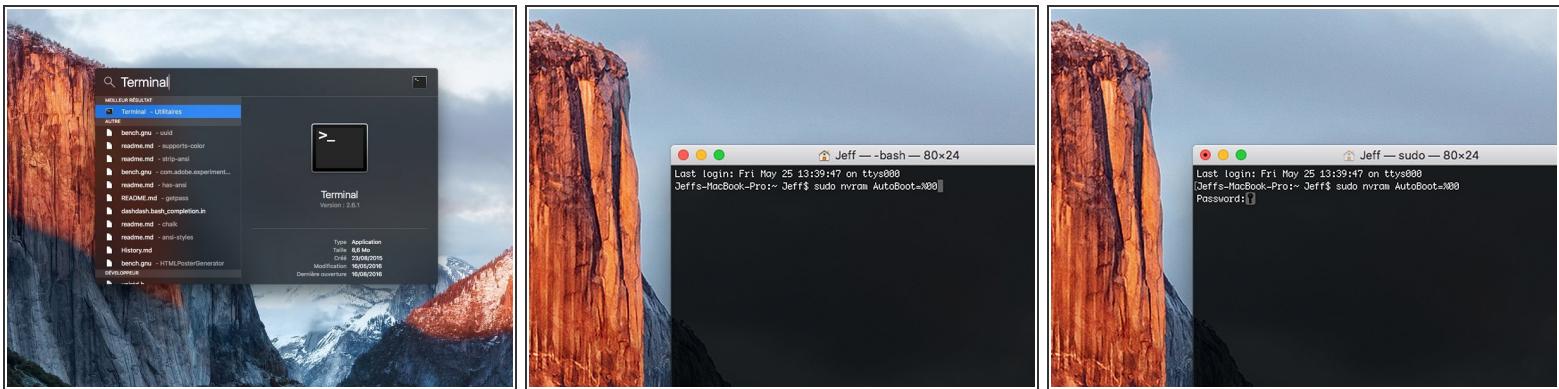
### TOOLS:

- 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)
- T3 Torx Screwdriver (1)

### PARTS:

- MacBook 12" Retina (Early 2016) Trackpad (1)
- MacBook 12" Retina (Early 2016) Trackpad Ribbon Cable (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**

## 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

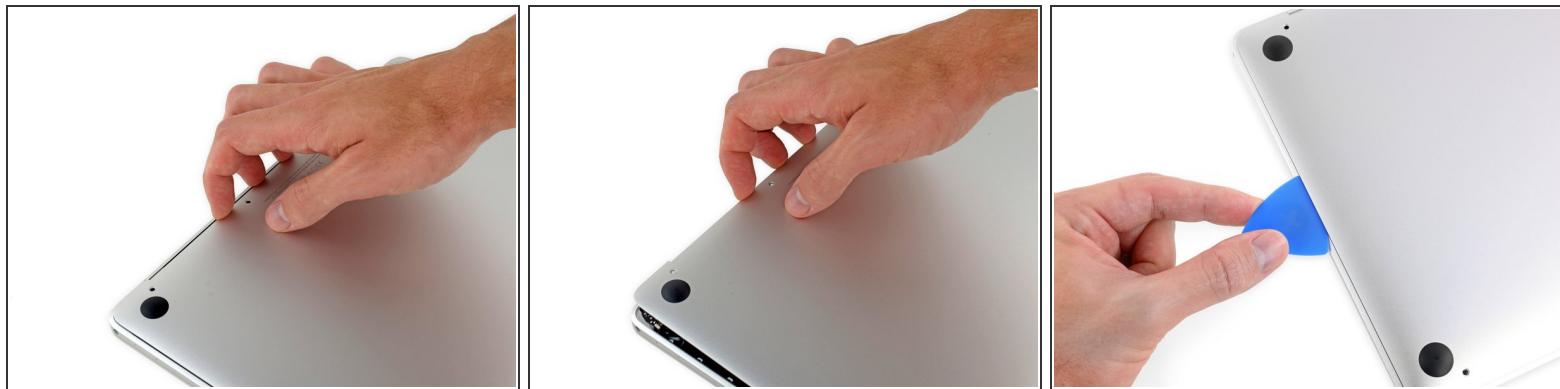


Note the orientation of the screws as you remove them—they need to be reinstalled at a slight angle.



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



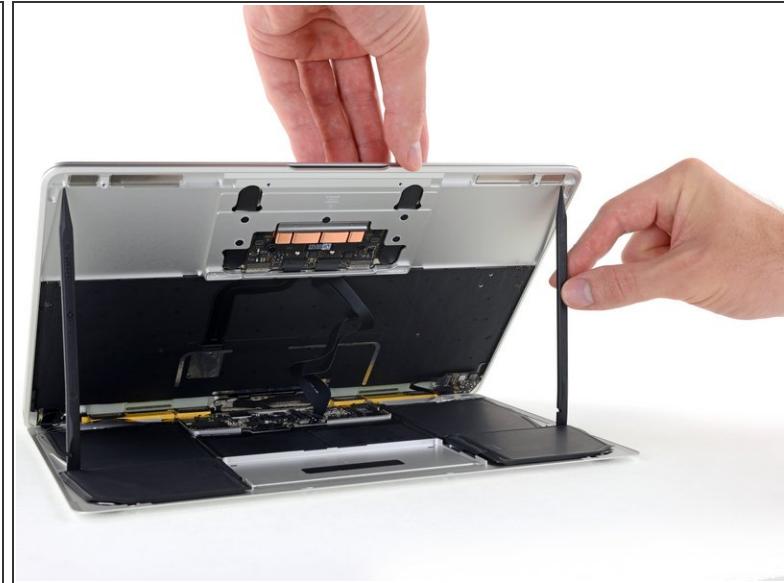
- Wedge your fingers between the upper case and the lower case, starting from the rear of the MacBook between the hinges.
- ⚠ Lift the lower case only slightly to avoid damaging the cables that connect the lower case to the upper case.
- Keeping a firm grip, lift steadily until the lower case separates 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.

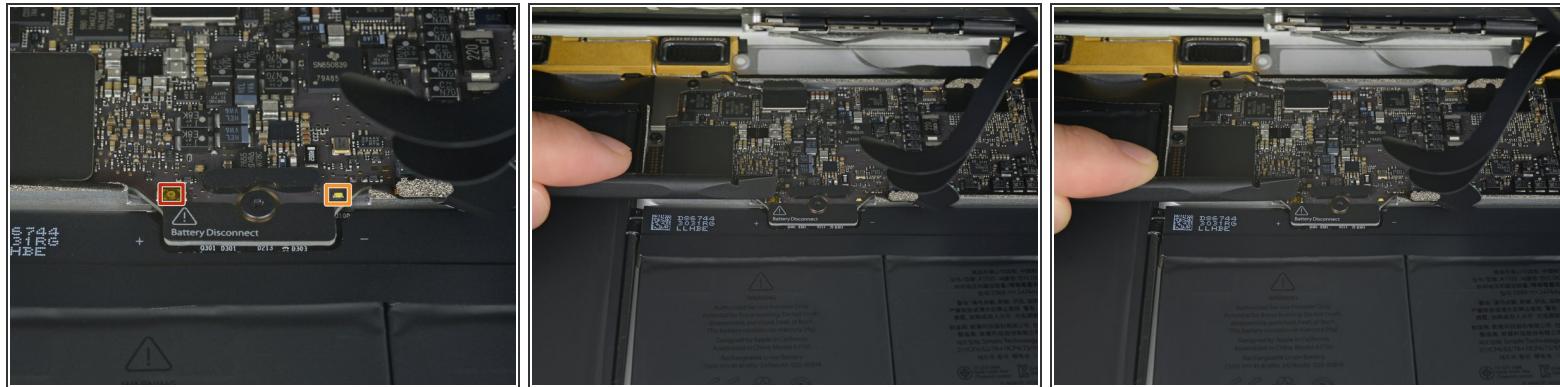
## Step 5



- 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°.

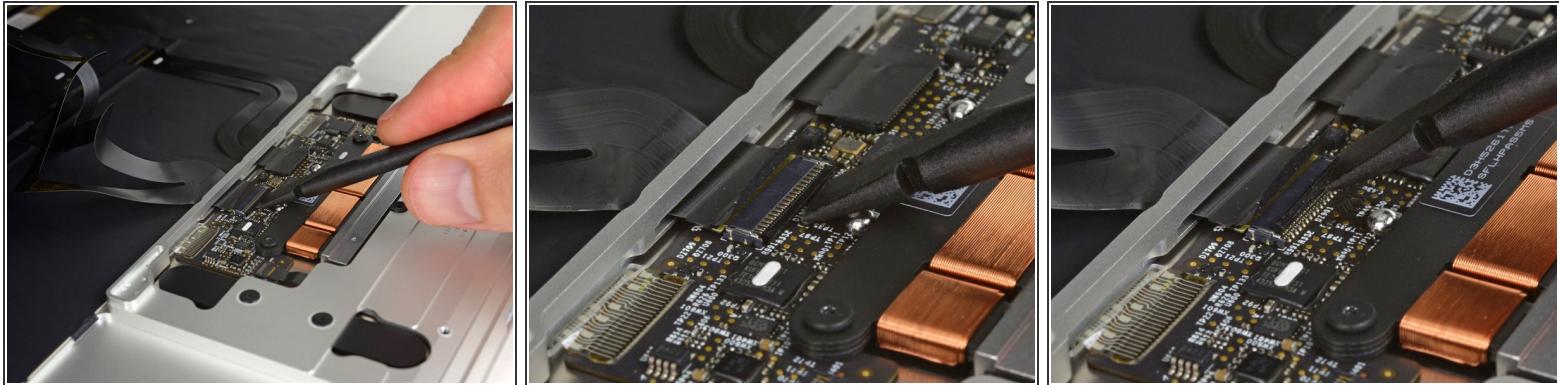
 Take care not to damage the ribbon cables that still attach the lower case to the MacBook.

## Step 9



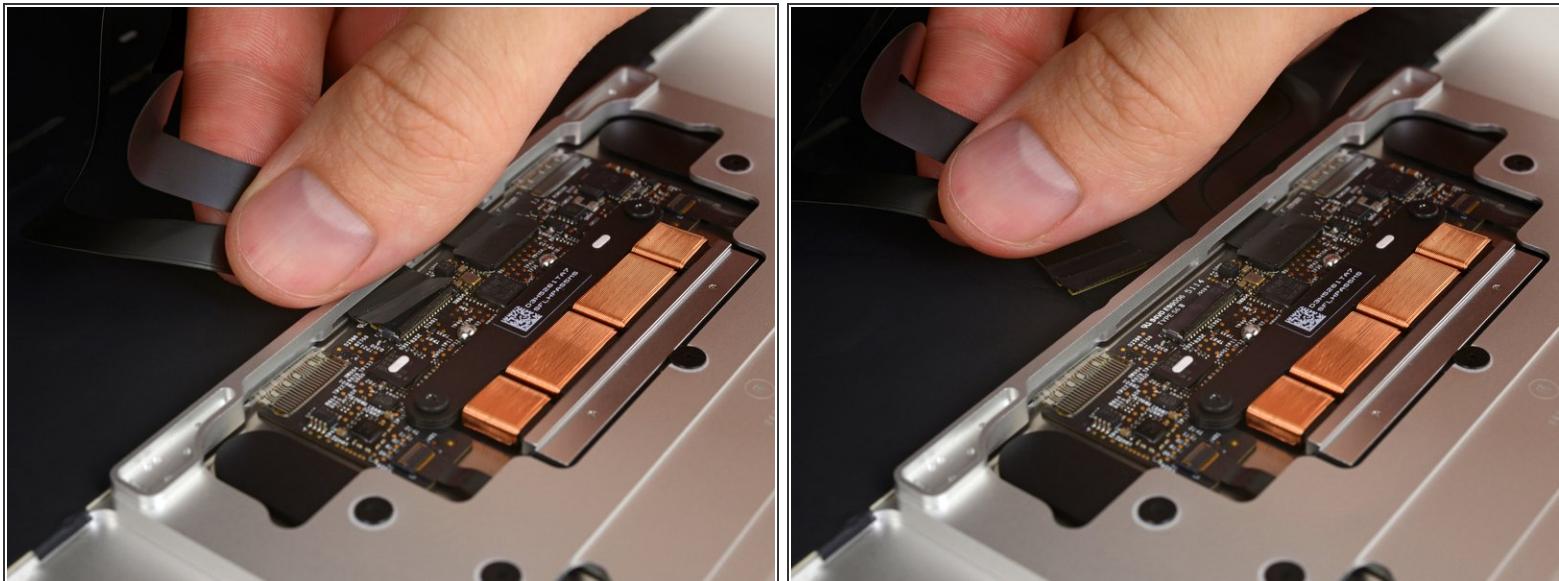
- Use tweezers to peel back the tape covering the trackpad cable ZIF connector.

## 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.

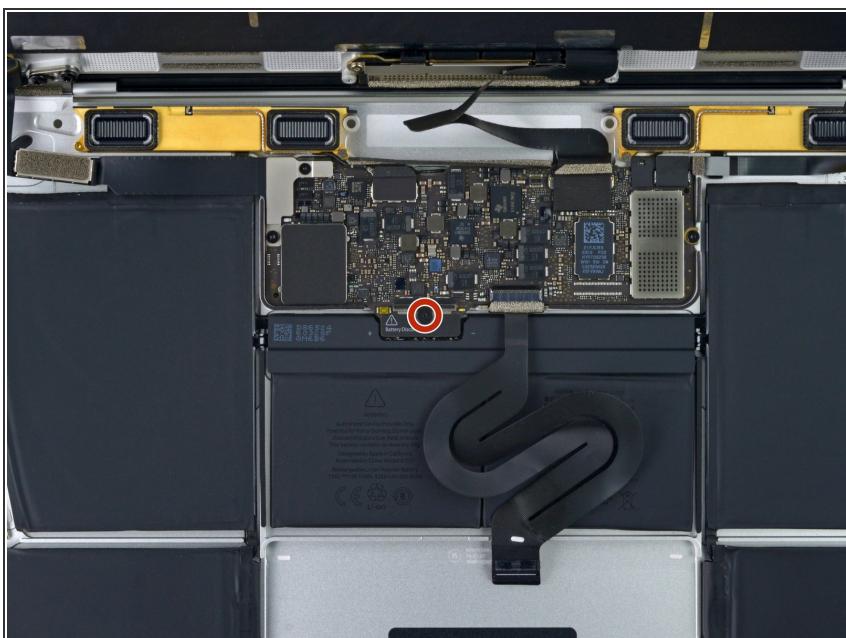
## Step 12



- 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.

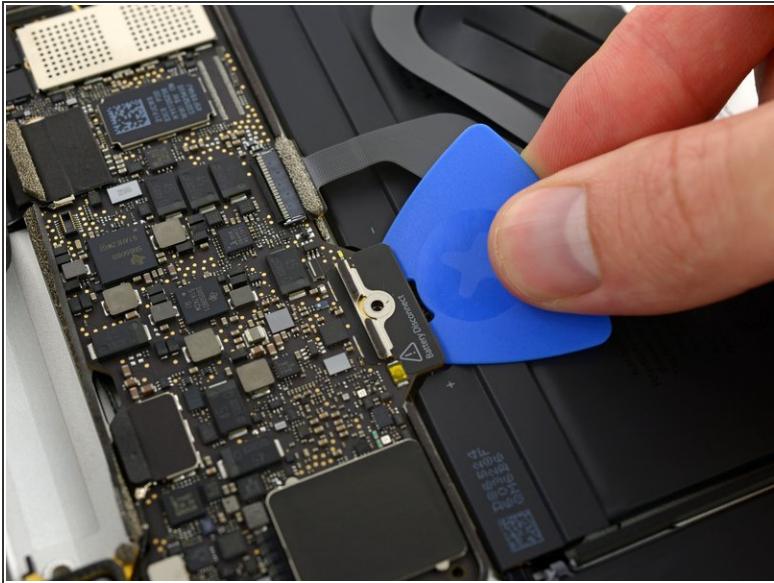
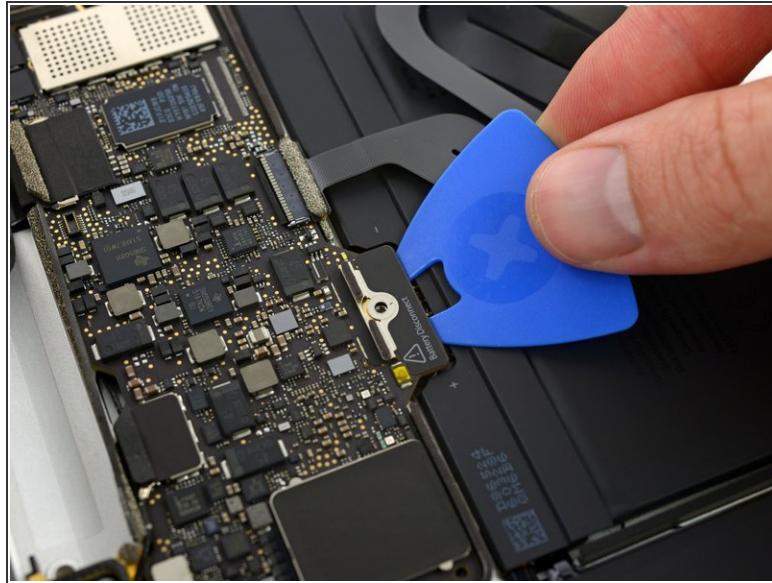
 It's possible to open the MacBook all the way and lay both sides down flat, but this may damage the flex cables and is not recommended.

## Step 13



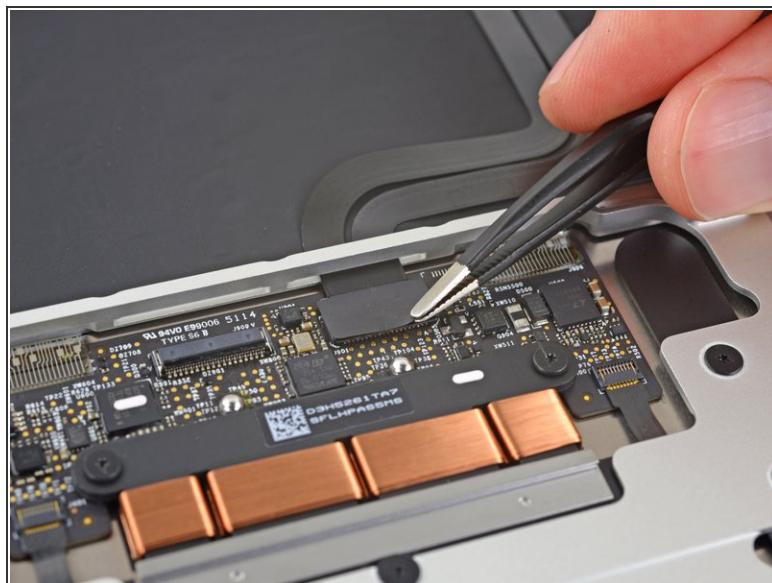
- Remove the single 2.9 mm T5 Torx screw securing the battery connector to the logic board.

## Step 14



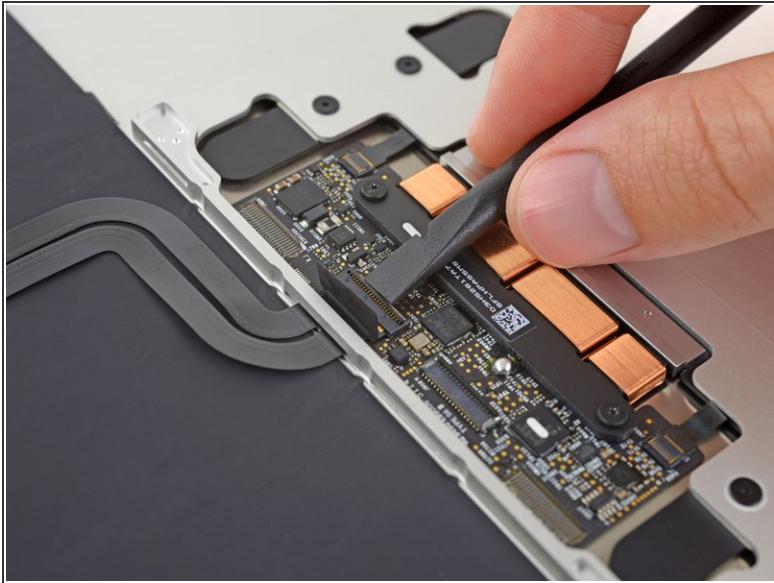
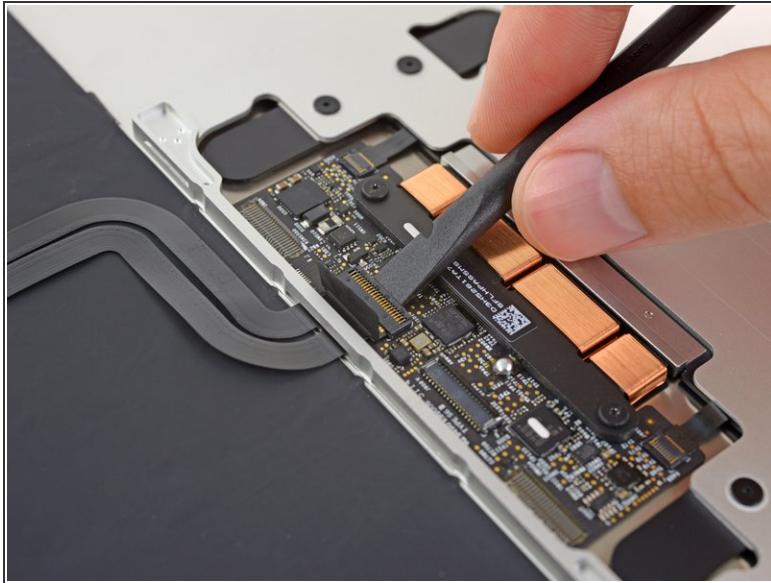
- As an added precaution, you may physically disconnect the battery by inserting a [battery isolation pick](#) between the logic board and the battery connector.

## Step 15 — Trackpad Assembly



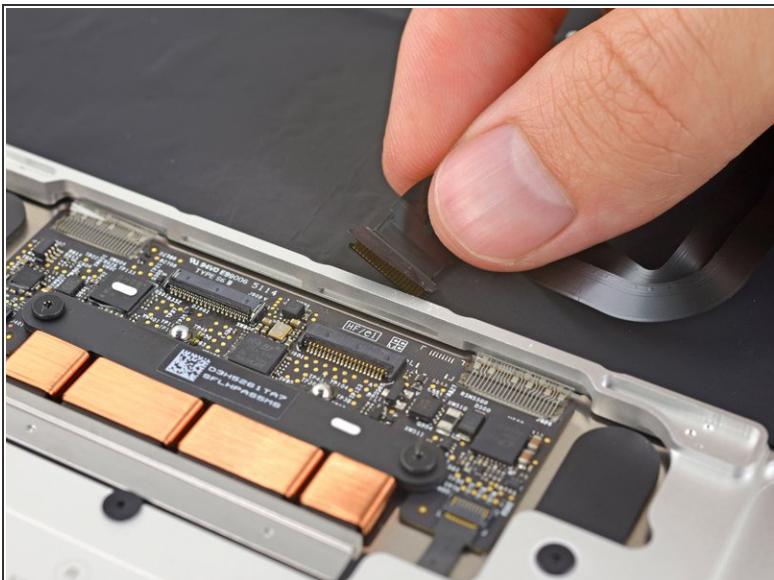
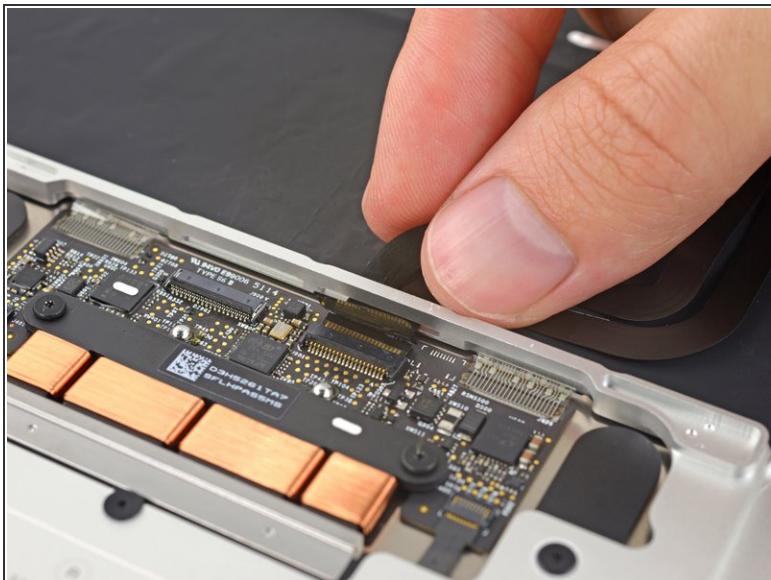
- Use a pair of tweezers to remove the tape covering the keyboard ribbon cable connector on the trackpad.

## Step 16



- Using a spudger, flip open the retaining flap on the keyboard ribbon cable ZIF connector.

## Step 17



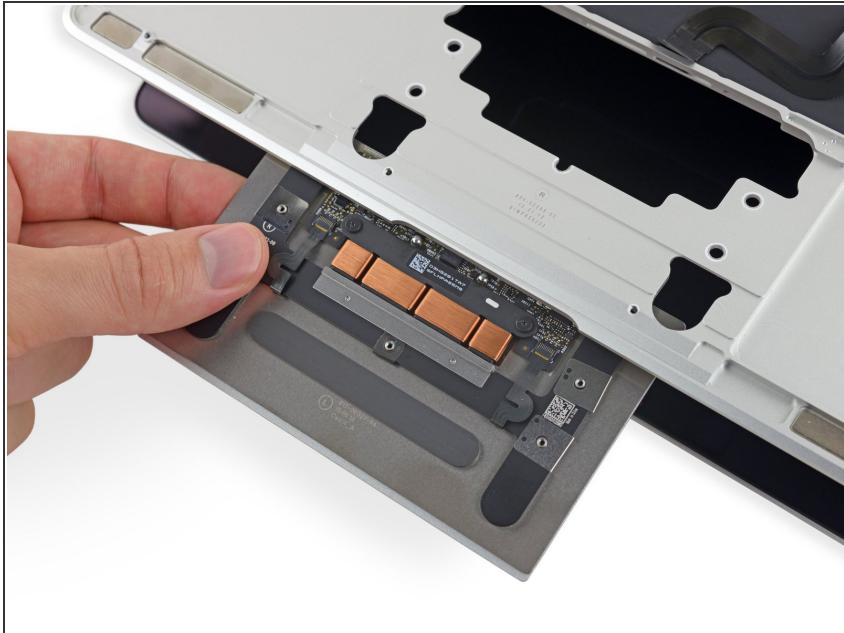
- Gently pull the keyboard ribbon cable out of its slot in the frame.

## Step 18



- Remove the five 2.5 mm T3 Torx screws securing the trackpad to the case.

## Step 19



- Hinge open the display just slightly to free the trackpad assembly from the upper case, and remove the trackpad assembly.
  - Metal brackets on each side of the trackpad may fall away during removal. Be sure to position them as shown in the photo during reassembly.

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