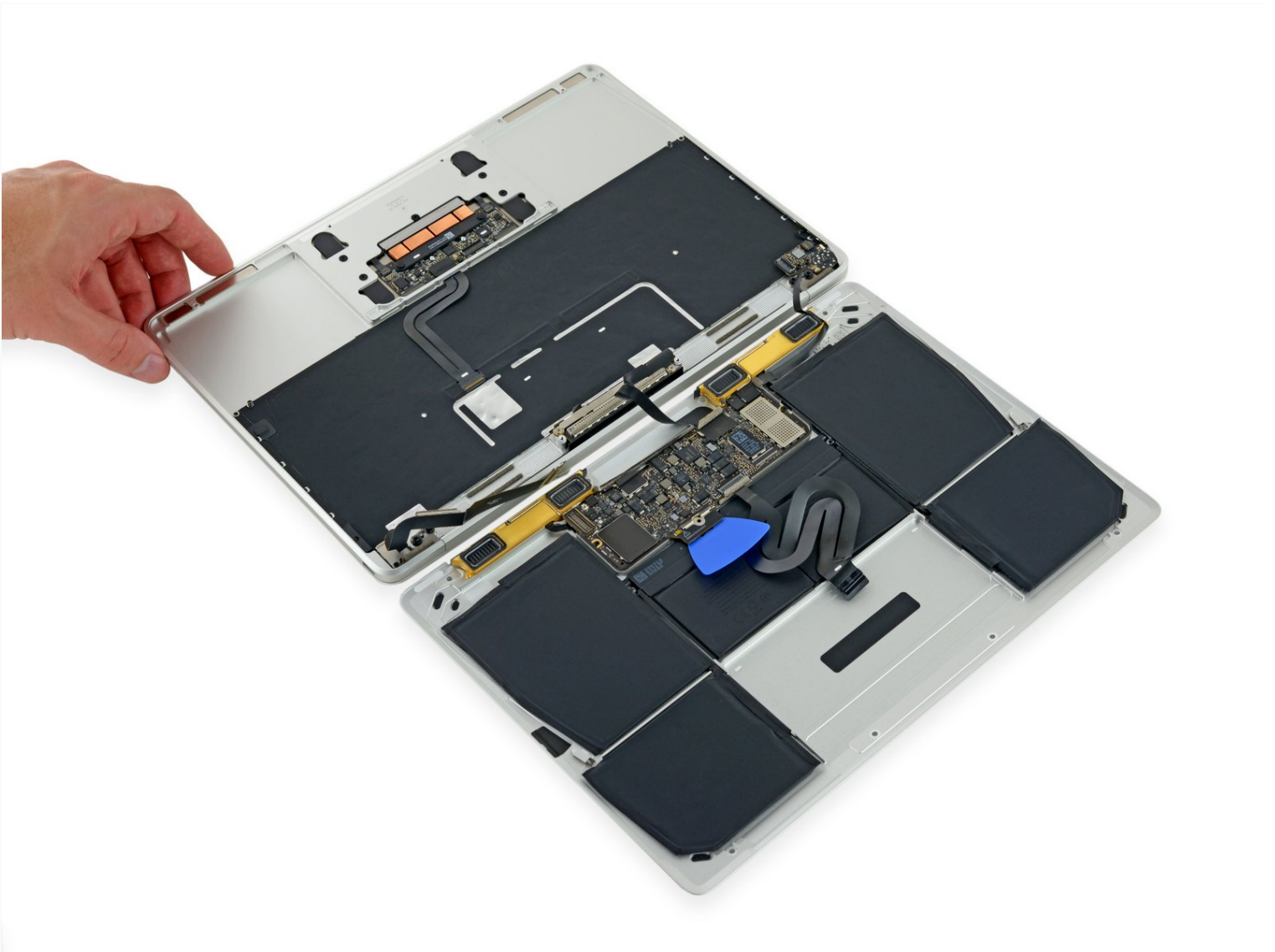# Retina MacBook 2016 Opening Lower Case Assembly

Prereq-only guide for opening the MacBook...

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INTRODUCTION

Prereq-only guide for opening the MacBook without fully disconnecting the lower case.

🔧 TOOLS:

P5 Pentalobe Screwdriver Retina MacBook Pro and Air (1)
Spudger (1)
Tweezers (1)
Battery Blocker (1)
T5 Torx Screwdriver (1)
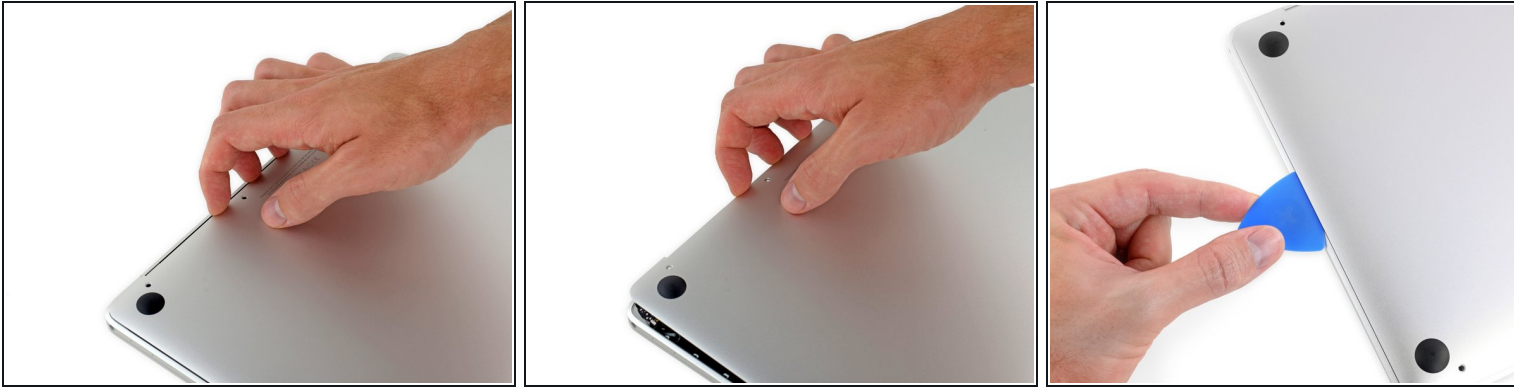Phillips #00 Screwdriver (1)

Step 1 — Unfasten the lower case

⚠️ 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.

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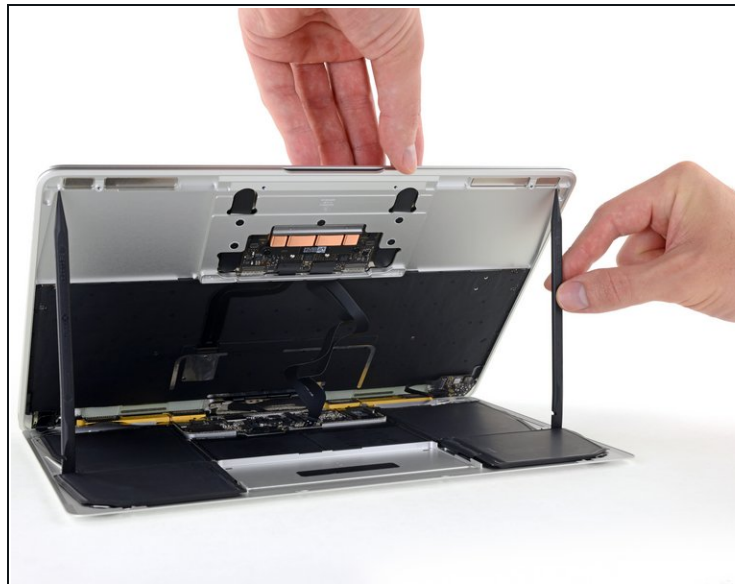
  - Keeping a firm grip, lift steadily until the lower case separates slightly from the upper case.

  ⓘ 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 3

- While holding the lower case in place, carefully flip the MacBook over so the Apple logo faces up.
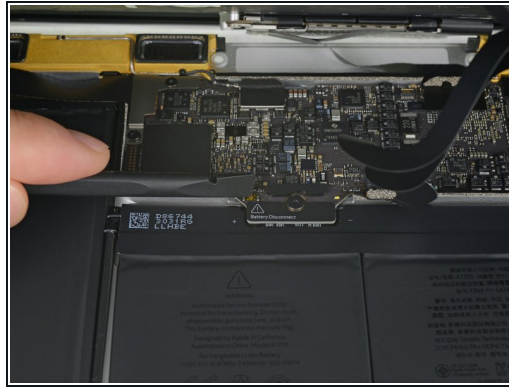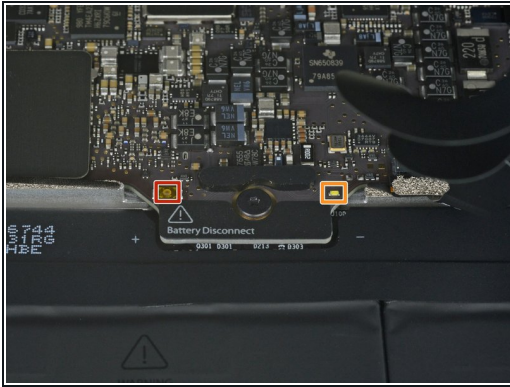
Step 4

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

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

Step 5

- 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 6

- Close the MacBook and carefully flip it upside-down.
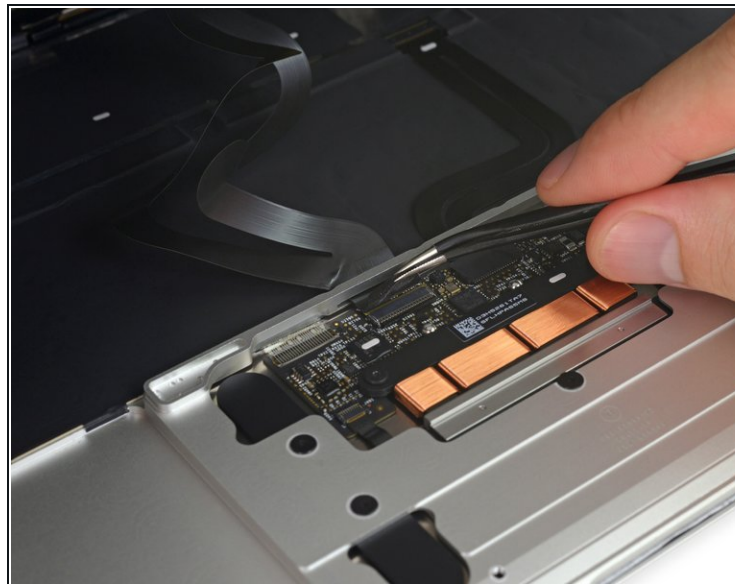
Step 7

- Lifting from the front edge, open the lower case to an angle of about 45°.
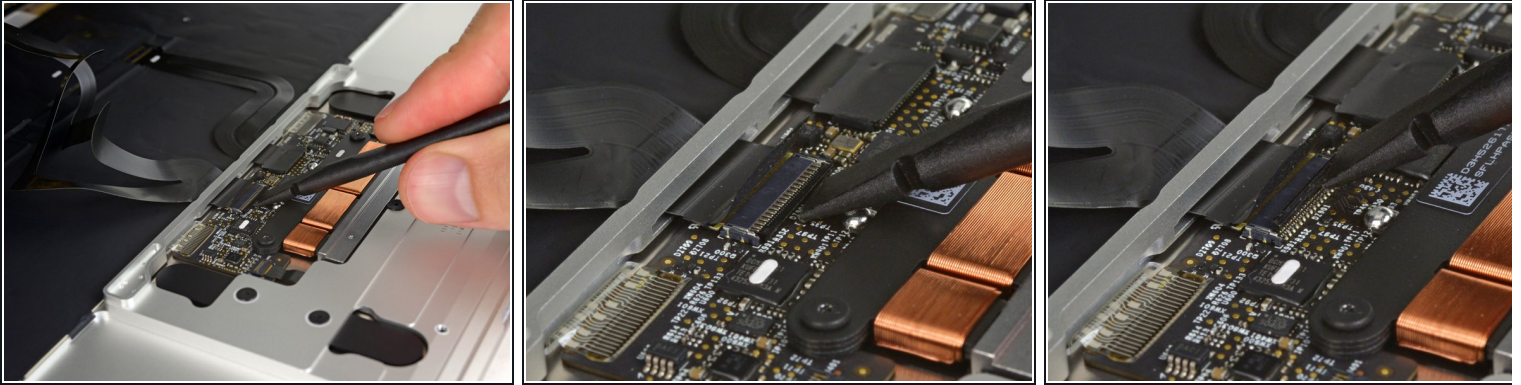
⚠️ Take care not to damage the ribbon cables that still attach the lower case to the MacBook.
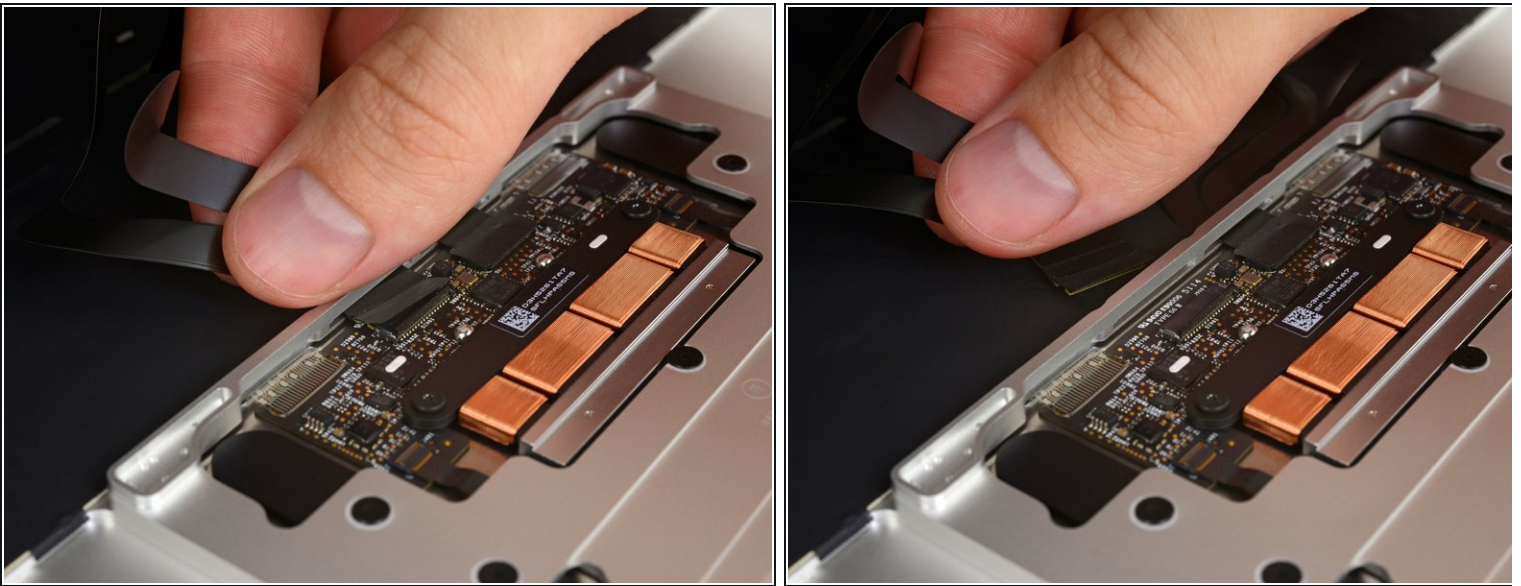
Step 8

- Use tweezers to peel back the tape covering the trackpad cable ZIF connector.
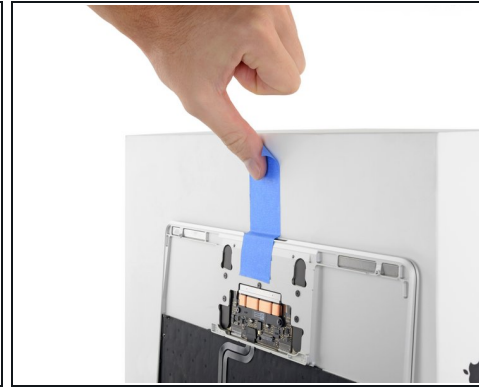
Step 9

- Use a spudger to carefully flip up the retaining flap on the trackpad cable [ZIF connector](#).

Step 10

- Disconnect the trackpad ribbon cable from the trackpad by pulling it gently through its slot in the frame.
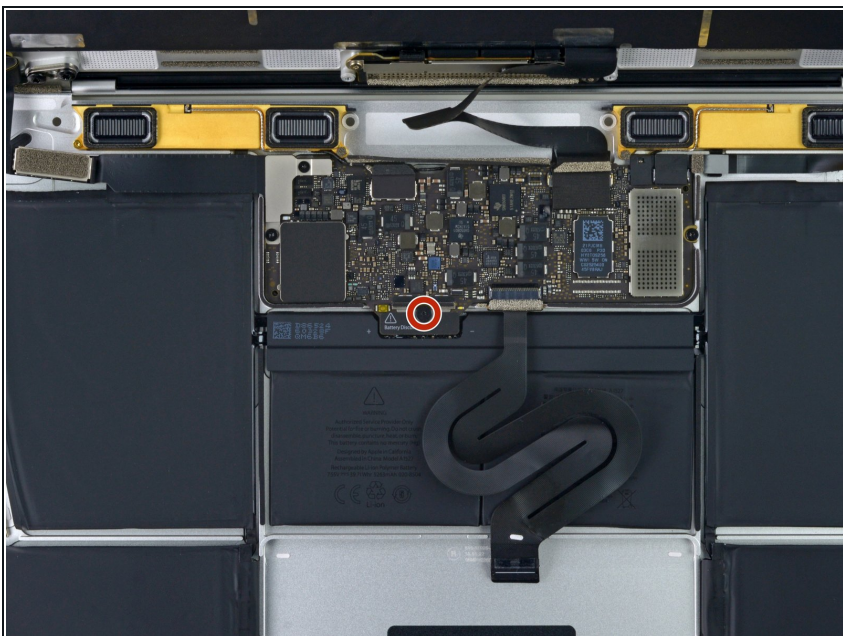
Step 11

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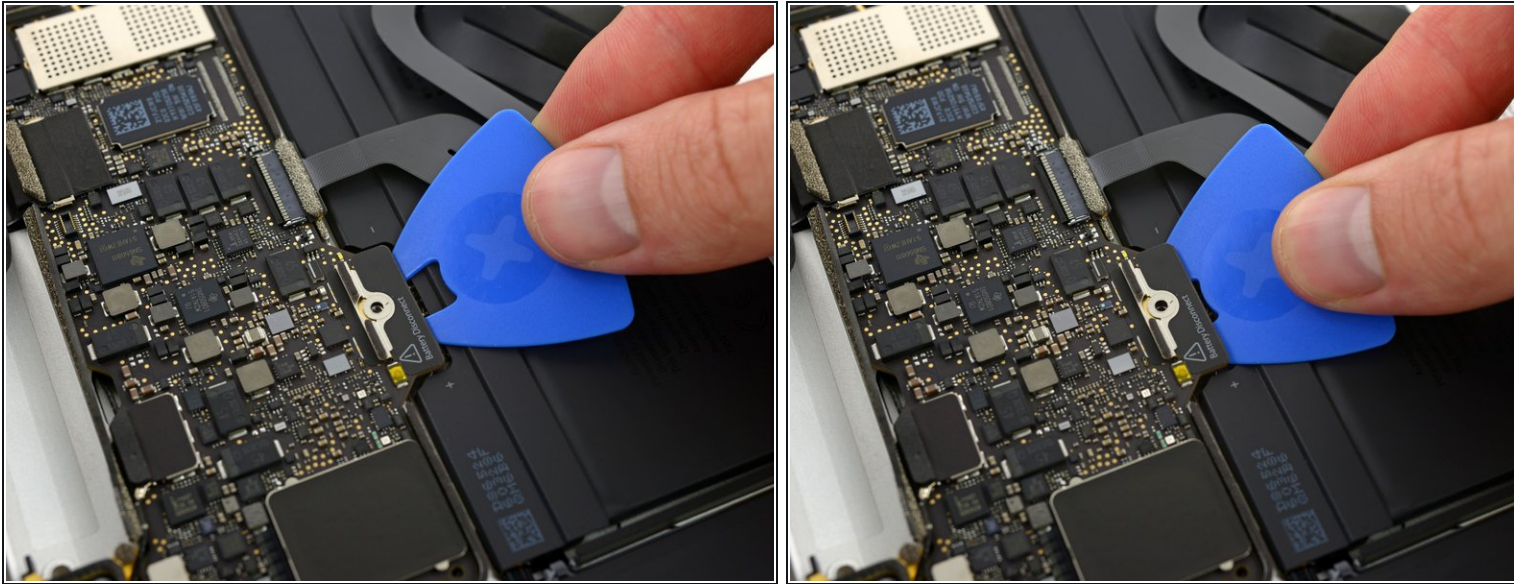
⚠️ It's possible to open the MacBook all the way and lay both sides down flat, but this may damage the flex cables and is not recommended.

Step 12

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

Step 13

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

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