

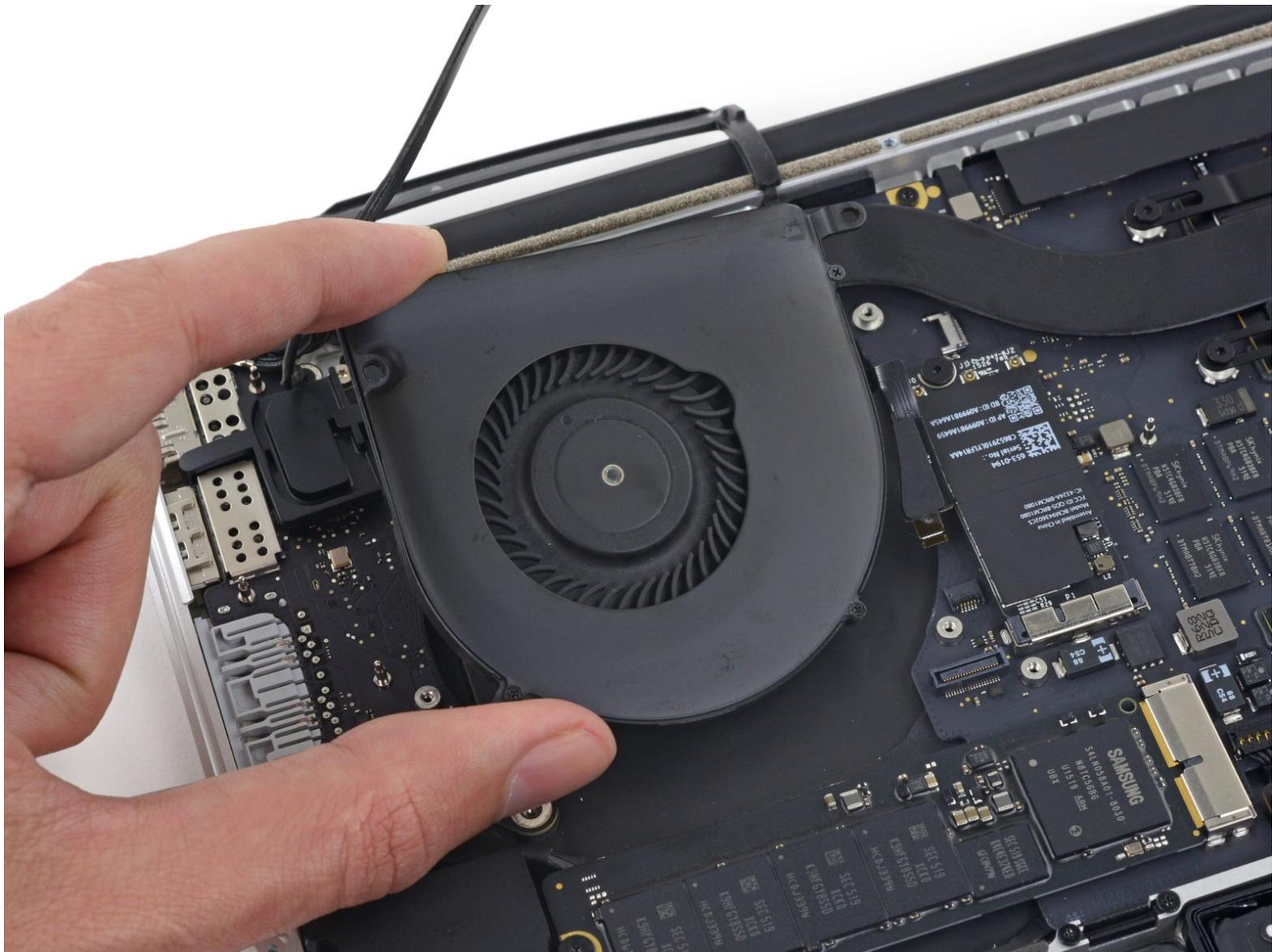


MacBook Pro 15" Retina Display Mid 2015

Right Fan Replacement

Replace the Right Fan in your MacBook Pro 15" Retina Display Mid 2015.

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INTRODUCTION

Use this guide to help you replace a damaged, broken, or faulty right fan.

Note that the right fan is on the right of the machine while you're using it, and on the left while you're working on it.



TOOLS:

- [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
- [Spudger](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [Tweezers](#) (1)



PARTS:

- [MacBook Pro 15" Retina \(Late 2013-Mid 2015\) Right Fan](#) (1)

Step 1 — Lower Case



- Remove the following P5 pentalobe screws securing the lower case to the MacBook Pro:
 - Eight 3.1 mm
 - Two 2.3 mm

Step 2



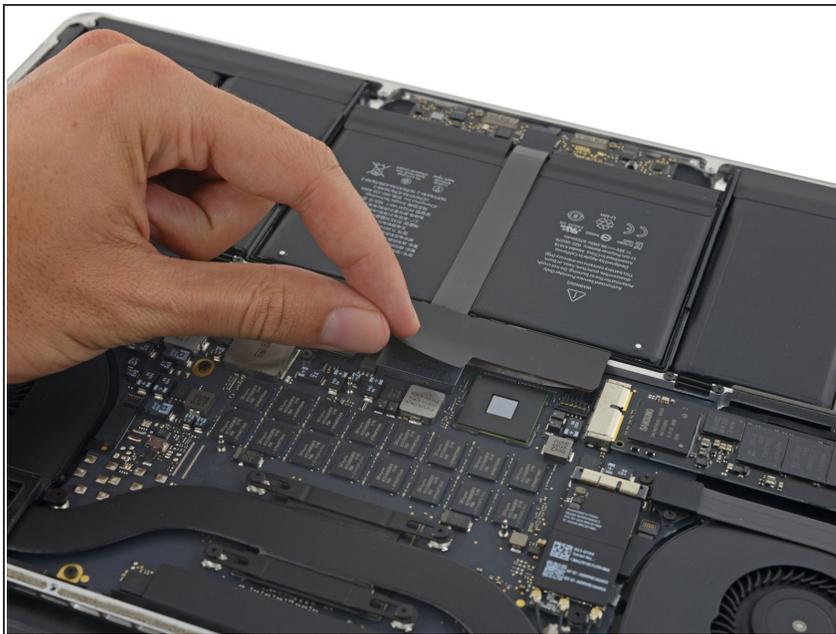
- Lifting from the edge nearest the clutch cover, lift the lower case off the MacBook Pro.

Step 3



-  The lower case has two plastic pegs (red) that fit into plastic clips in the upper case (orange).
-  During reassembly, gently push down the center of the lower case to reattach the case to its two plastic clips.

Step 4 — Battery Connector



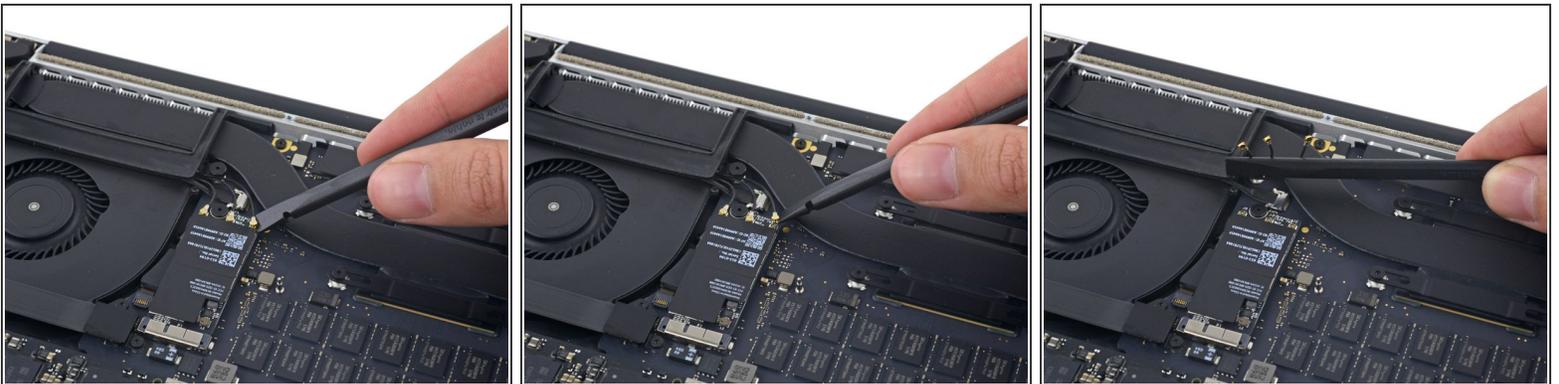
- Peel back the sticker covering the battery connector.

Step 5



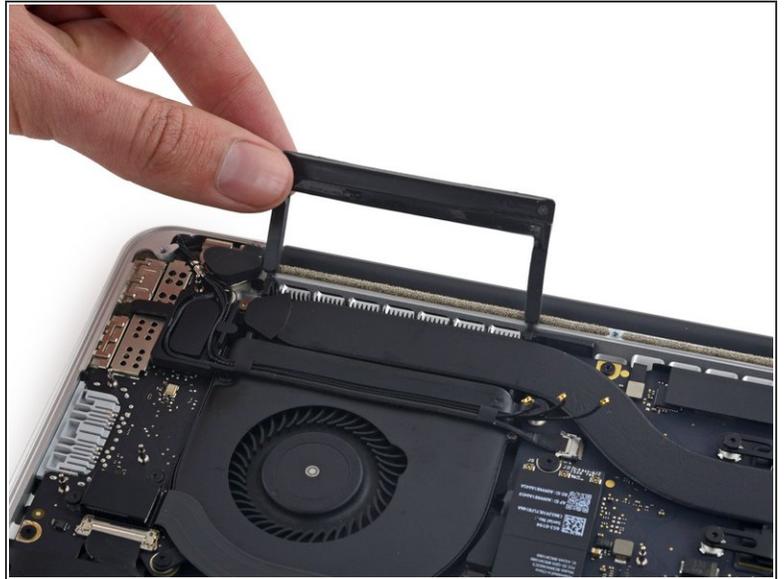
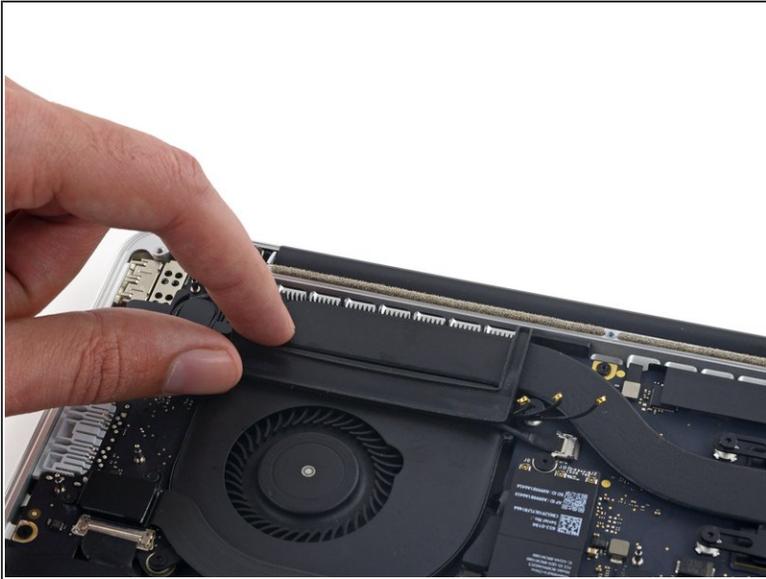
- Gently lift each side of the battery connector to pry the connector out of its socket on the logic board.
- Bend the connector back toward the battery, ensuring that the battery connector doesn't accidentally make contact with the logic board.

Step 6 — AirPort/Camera Cables



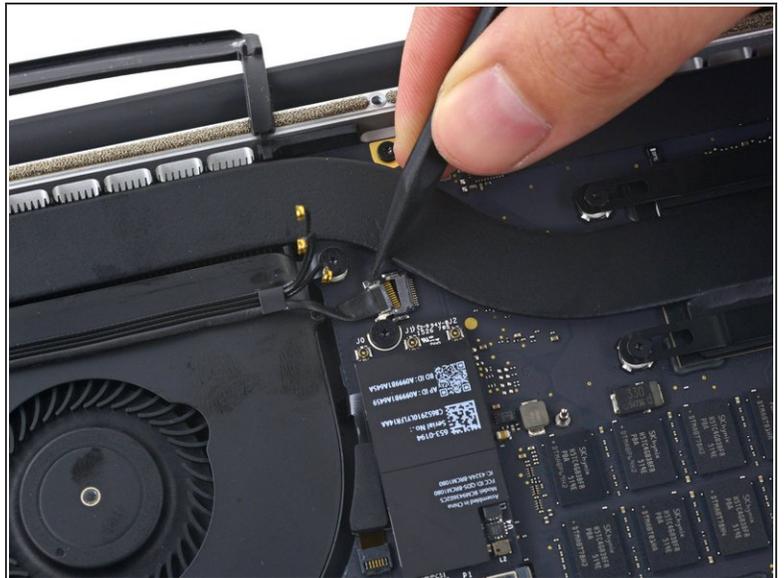
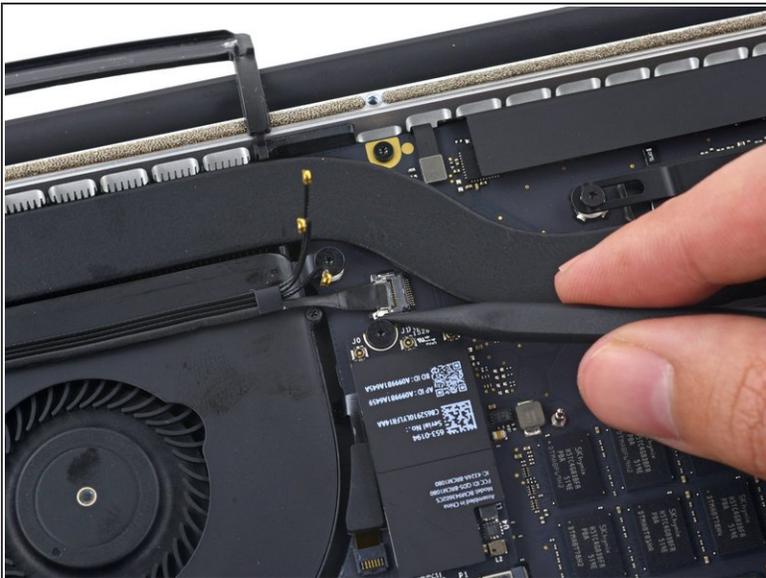
- Use a spudger or tweezers to pry the three AirPort antenna cables straight up off of their sockets on the AirPort board, and bend them up and out of the way.
- ⚠ The cable connection points are **very** fragile. Be careful to lift only on the connector, and not on the socket or cable.
- ✪ To reconnect, align the connector carefully into position over the socket, and press it down firmly with the flat of your spudger.

Step 7



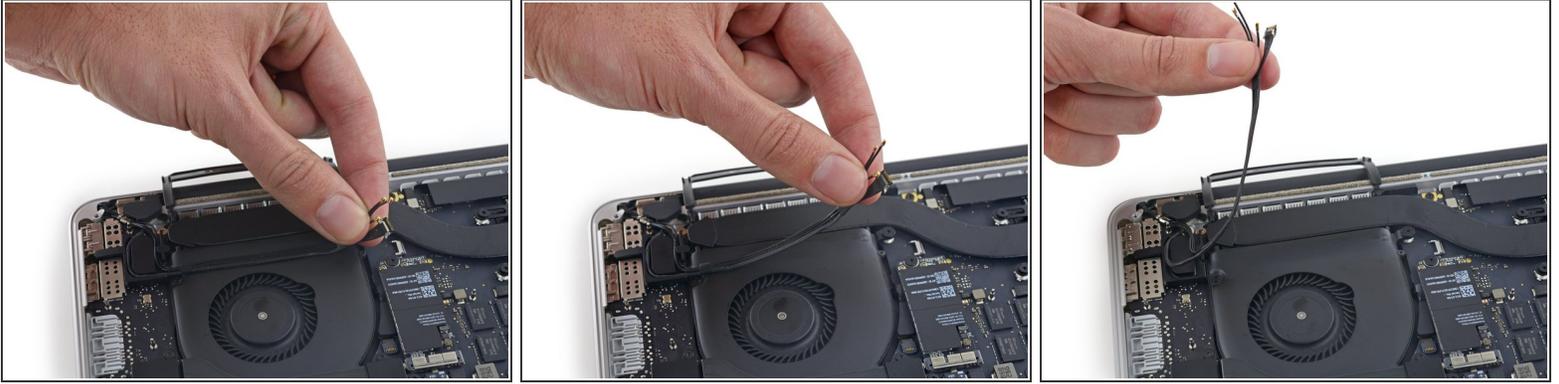
- Peel the right rubber cover up off the fan and fold it out of the way.

Step 8



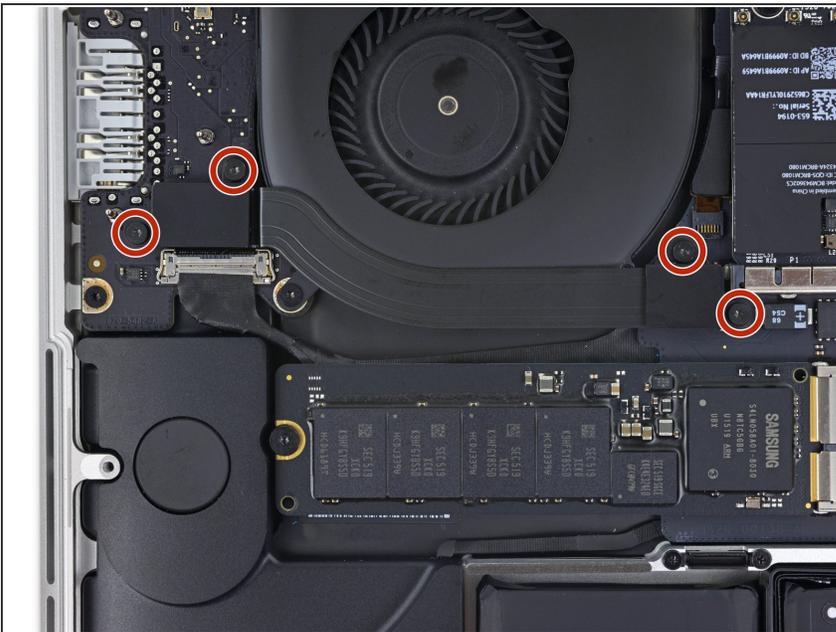
- Use the tip of a spudger to push the camera cable connector out of its socket on the logic board.
- ⓘ Be sure to push parallel to the board, pushing first on one side, then the other to "walk" the connector out of its socket.

Step 9



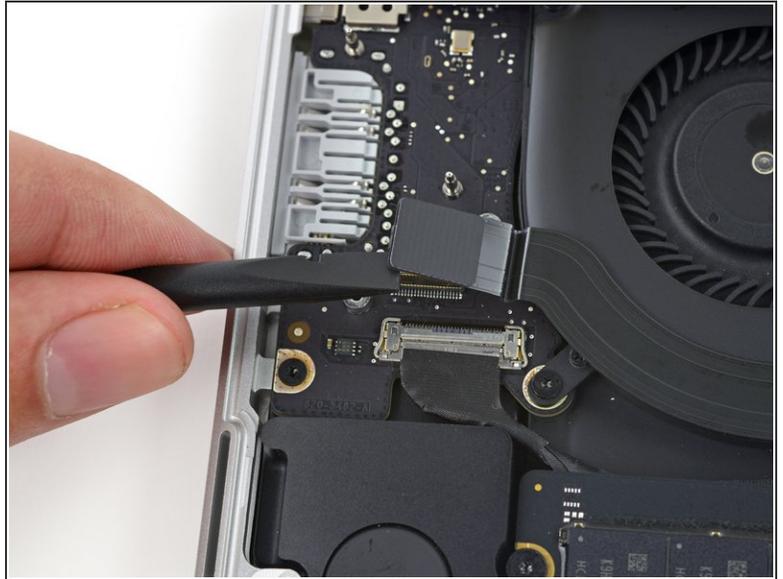
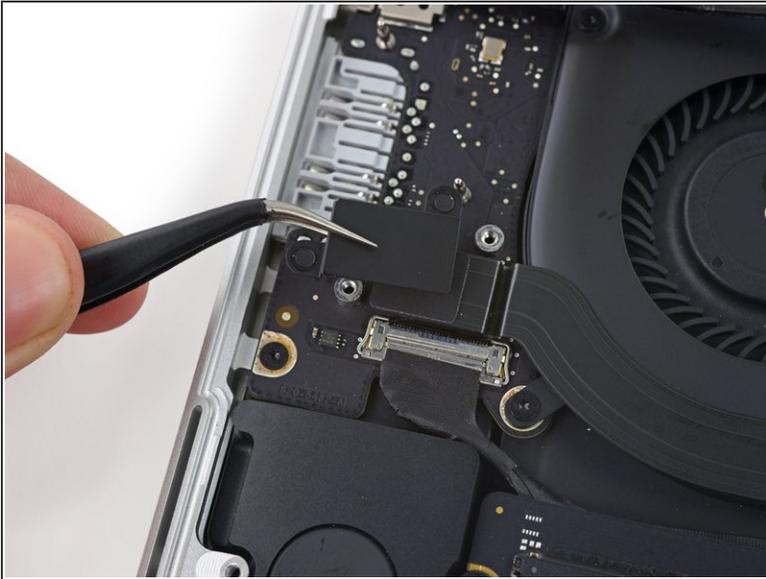
- Use your fingers to pull the AirPort/Camera cables up off the fan.
- ⓘ The cables are adhered to the fan, so peel them up carefully to avoid damaging them.
- Carefully de-route the cables from the plastic cable guide.
- ☞ On reassembly, there should be enough adhesive still on these cables to stick them back down to the fan.

Step 10 — I/O Board Cable (Top)



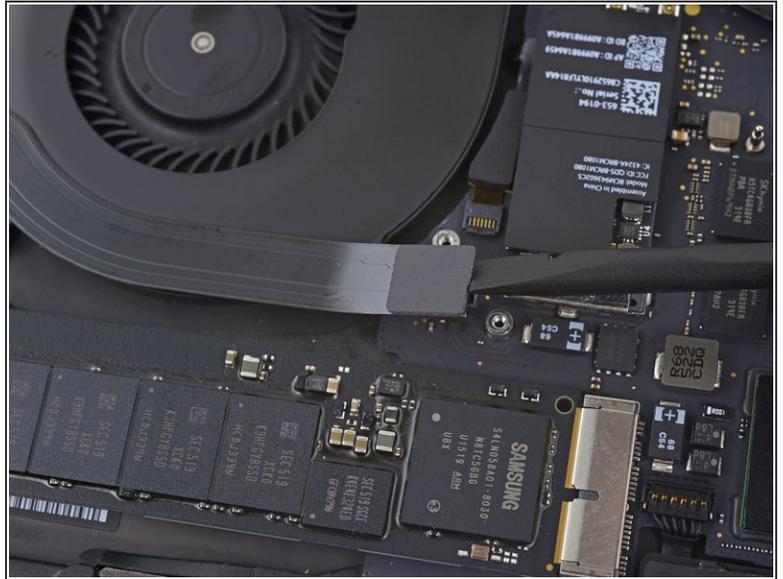
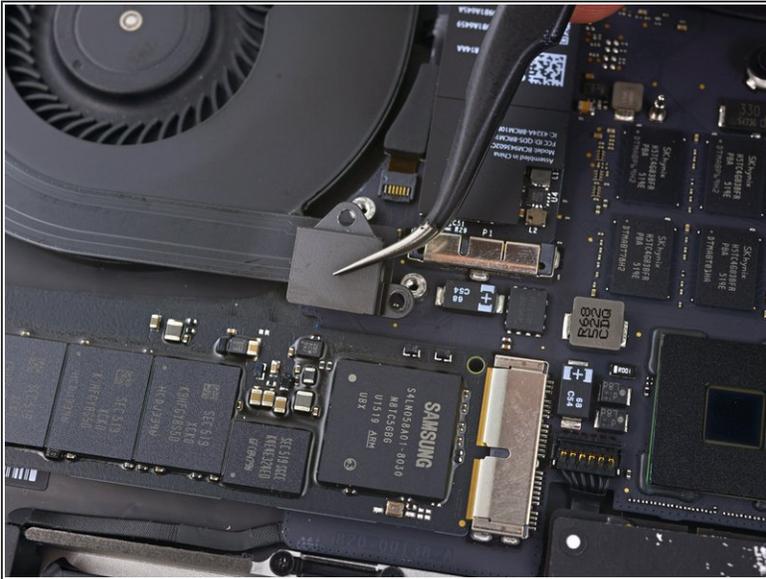
- Remove the four 2.2 mm T5 Torx screws securing the I/O board cable connector covers.

Step 11



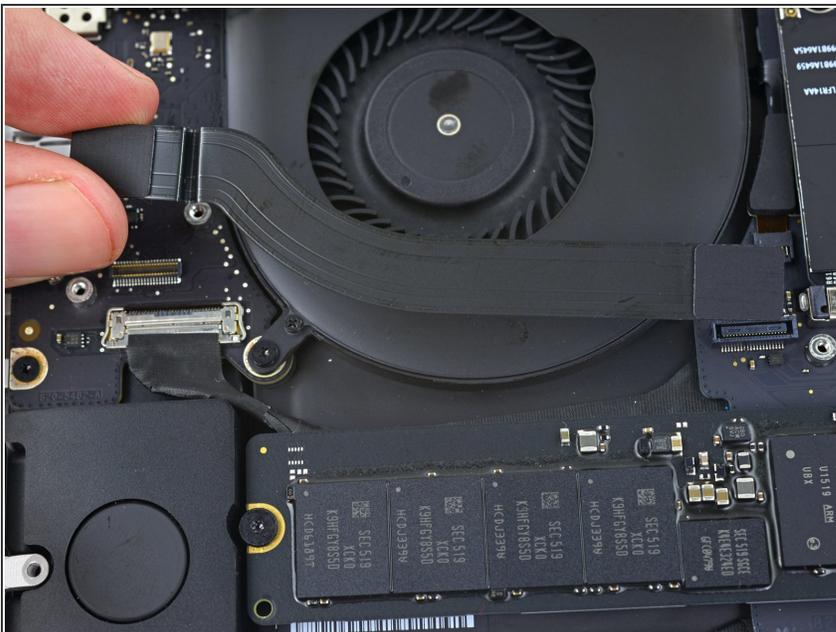
- Remove the left connector cover.
- Use the flat end of a spudger to pry the left end of the I/O board cable up from its socket on the logic board.

Step 12



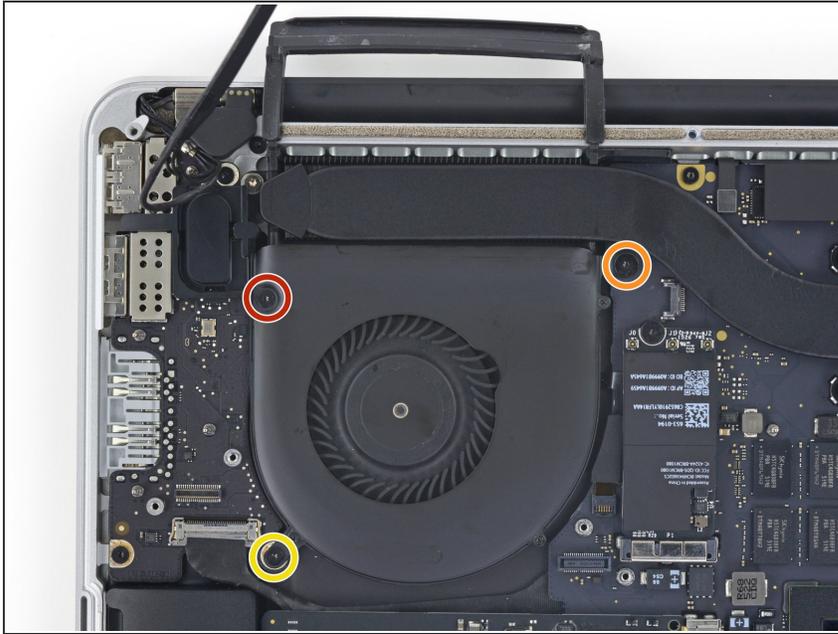
- Remove the right connector cover.
- Use the flat end of a spudger to pry the right end of the I/O board cable up from its socket on the logic board.

Step 13



- Peel the I/O board cable up from the adhesive securing it to the fan.
- Remove the cable.

Step 14 — Right Fan



- Use a T5 Torx driver to remove the following three screws securing the right fan to the logic board:
 - One 5.0 mm screw with a 2.0 mm long shoulder
 - One 4.0 mm screw with a wide head
 - One 4.4 mm screw

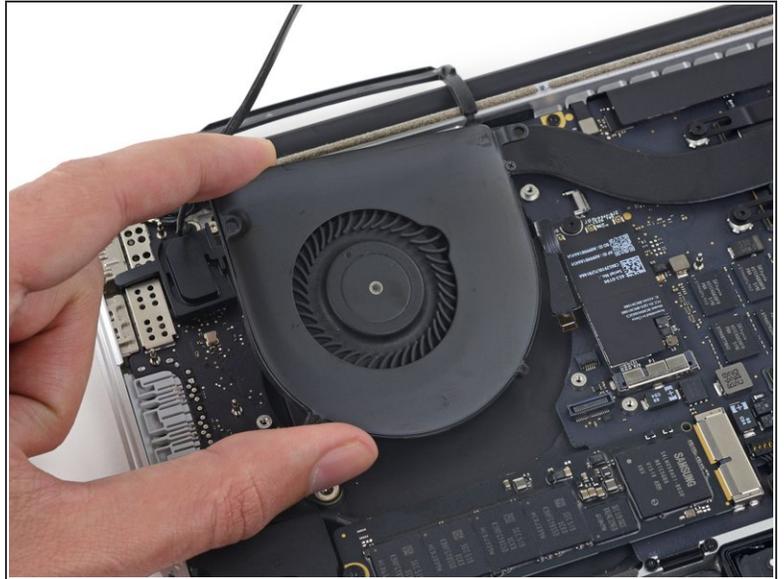
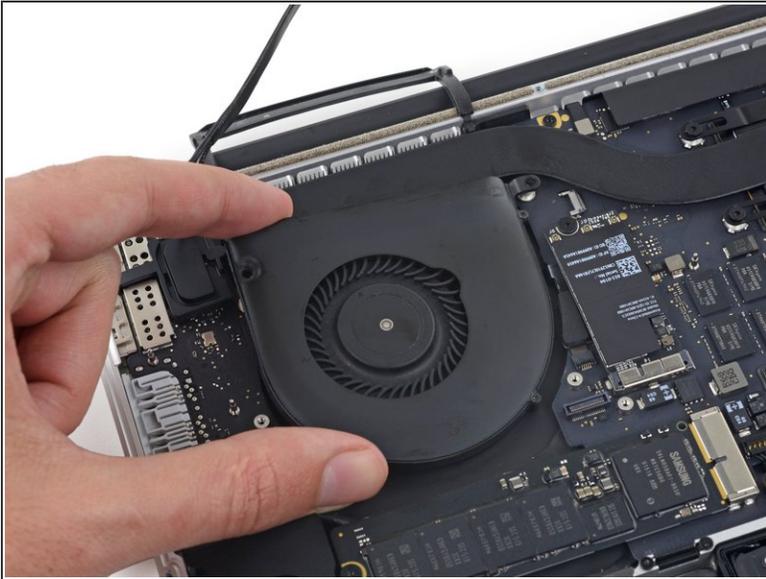
Step 15



- Use the tip of a spudger to flip up the retaining flap on the right fan ribbon cable ZIF socket.

⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

Step 16



- Lift the fan and push it gently towards the back edge of the MacBook to free the fan cable from its socket.
 - ⚠ The fan cable may be adhered to the logic board—to avoid tearing the cable, gently peel it up while lifting the fan.
- Remove the fan.

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