



MacBook Pro 13" Retina Display Late 2013 I/O Board Replacement

Replace the I/O Board in your MacBook Pro 13" Retina Display Late 2013.

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INTRODUCTION

Replace the I/O board, which includes the SD card slot, the HDMI port and the right USB port.

This guide requires the removal of the heat sink. Don't forget to follow our [thermal paste application guide](#) before you reinstall your heat sink.



TOOLS:

- [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
- [Spudger](#) (1)
- [Arctic Silver ArctiClean](#) (1)
- [Arctic Silver Thermal Paste](#) (1)
- [Phillips #000 Screwdriver](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [Tweezers](#) (1)
- [T8 Torx Screwdriver](#) (1)



PARTS:

- [MacBook Pro 13" Retina \(Late 2013\) Right I/O Board](#) (1)
- [MacBook Pro 13" Retina \(Late 2013/Early 2015\) I/O Board Data Cable](#) (1)

Step 1 — Lower Case



- Remove the following ten screws securing the lower case to the upper case:
 - Two 2.3 mm Pentalobe screws
 - Eight 3.0 mm Pentalobe 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 2



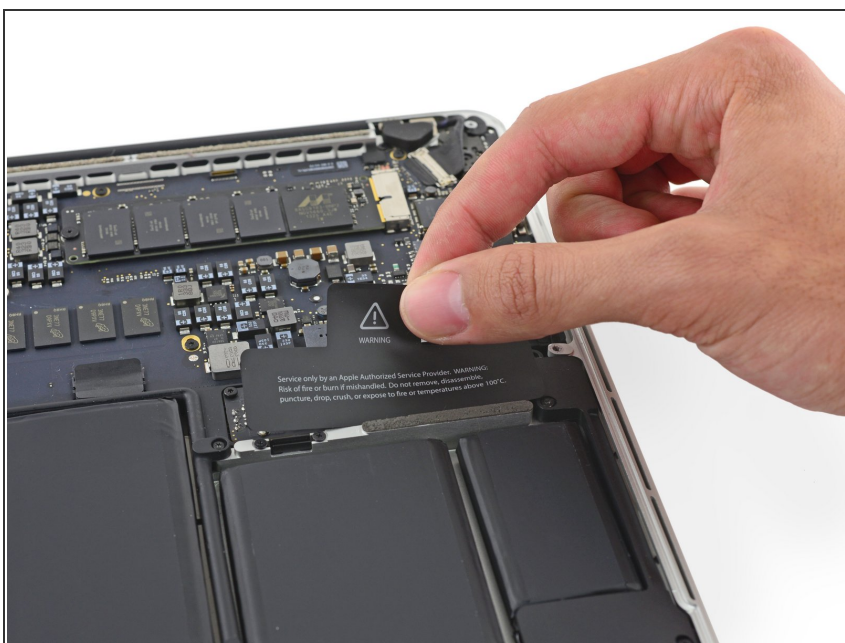
- Wedge your fingers between the upper case and the lower case.
- Gently pull the lower case away from the upper case to remove it.

Step 3



-  The lower case is connected to the upper case with two plastic clips near its center.
-  During reassembly, gently push down the center of the lower case to reattach the two plastic clips.

Step 4 — Battery Connector



-  If necessary, remove the plastic cover adhered to the battery contact board.

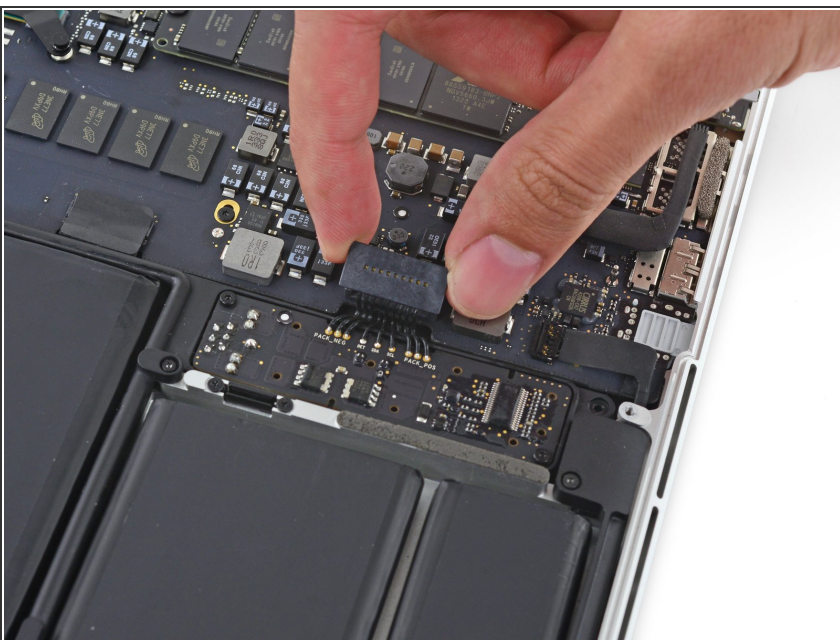
Step 5



- Use the flat end of a spudger to lift the battery connector straight up out of its socket on the logic board.

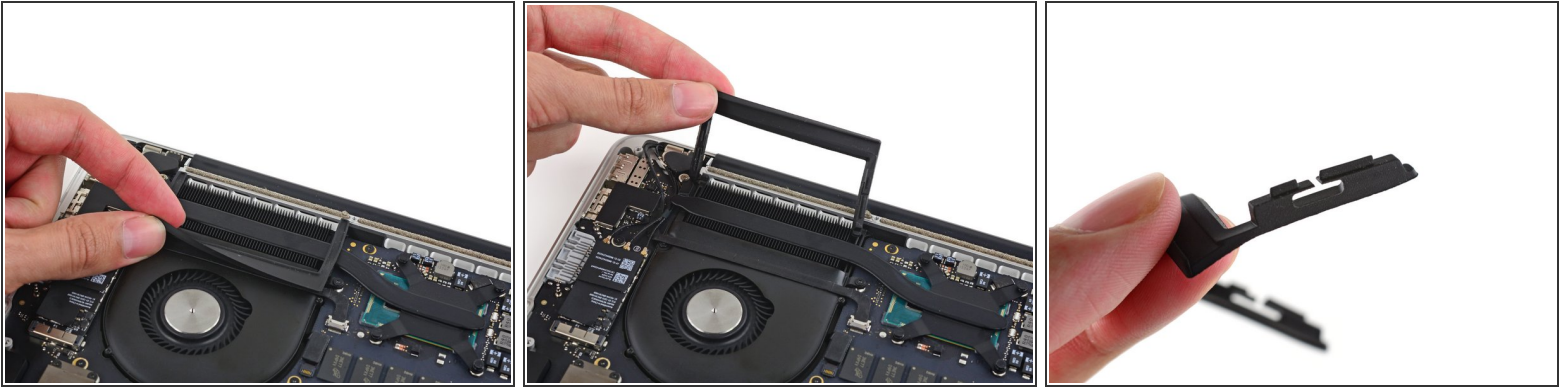
⚠ Be sure you lift up only on the connector itself, **not** the socket, or you risk permanent damage to the logic board.

Step 6



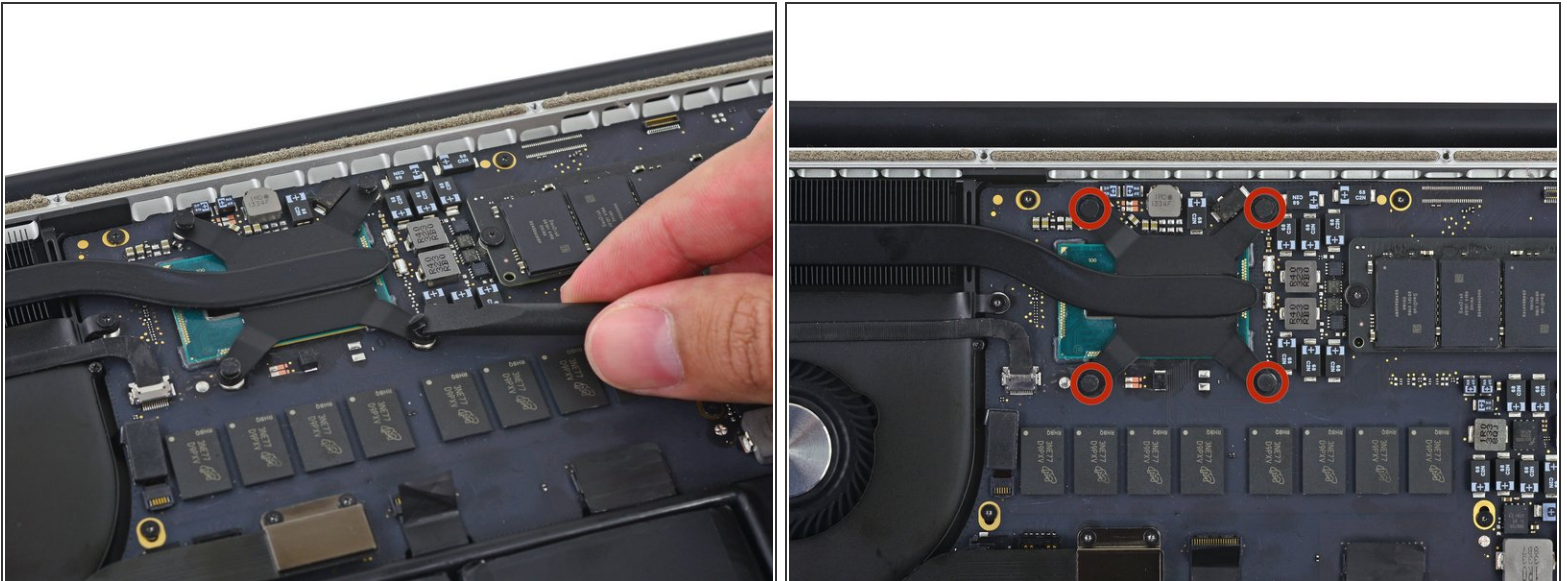
- ☑ Bend the battery connector up out of the way to prevent accidental contact with its socket during your repair.

Step 7 — Heat Sink



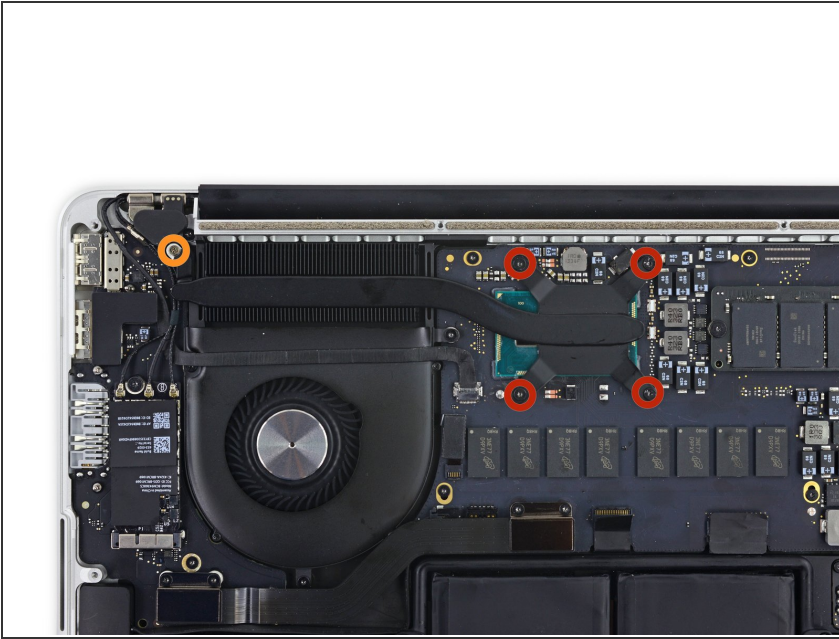
- Carefully remove the rubber fan bumper from the edge of the heat sink.
- ☑ The fan bumper wraps around the heat sink and fits into slots in the fan duct. During reassembly, be sure to fit the tabs into the notches in the fan duct.

Step 8



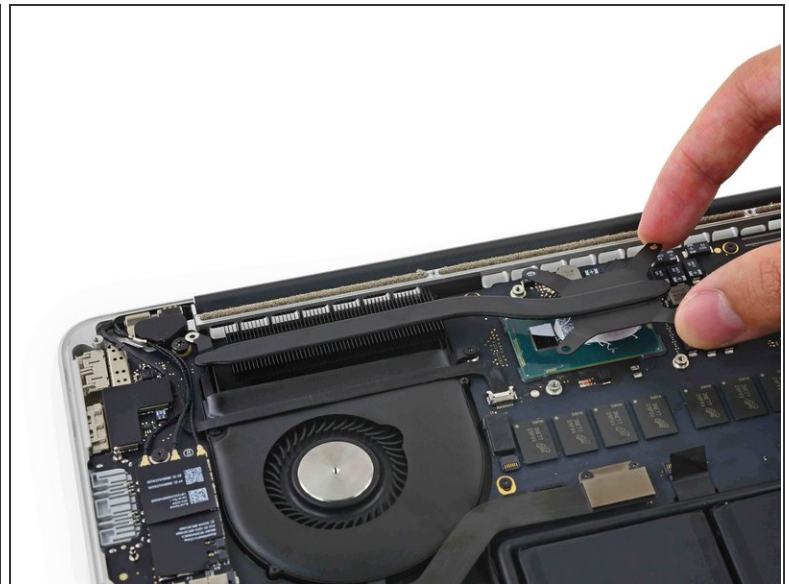
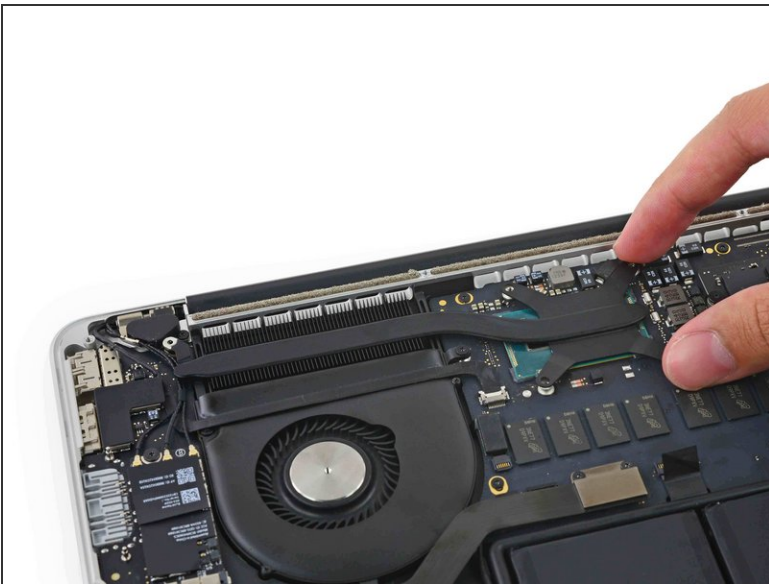
- Use the flat end of a spudger to peel the four foam stickers off of the heat sink screws.

Step 9



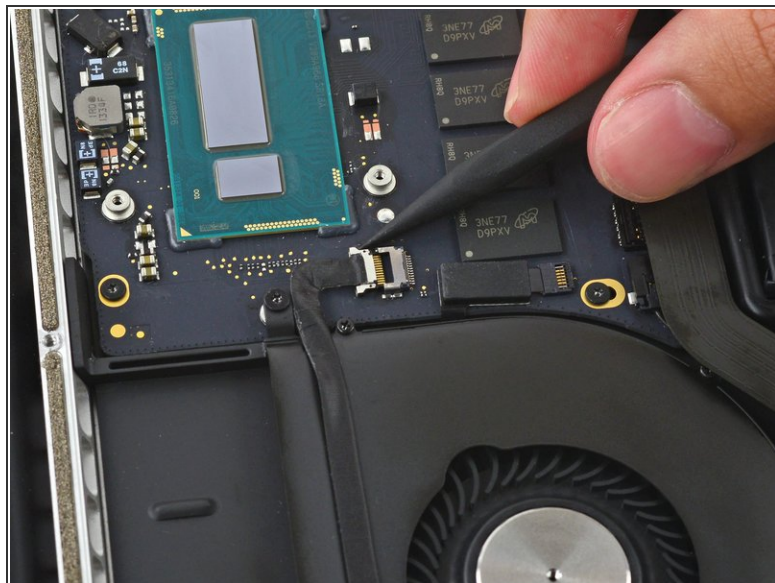
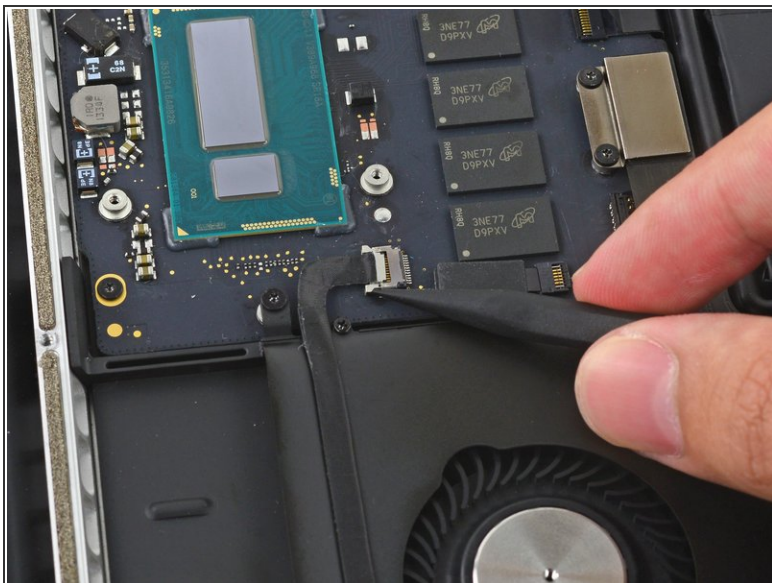
- Remove the following screws securing the heat sink to the logic board:
 - Four 2.6 mm T5 screws
 - One 2.4 mm Phillips #000 screw

Step 10



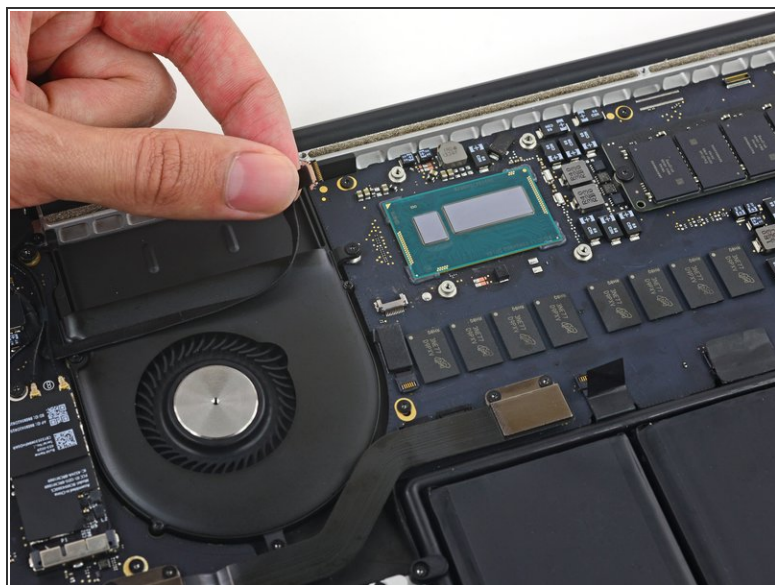
- Remove the heat sink from the laptop.
- ☒ When reassembling your computer, follow our [thermal paste application guide](#) to reapply the thermal paste.

Step 11 — Fan



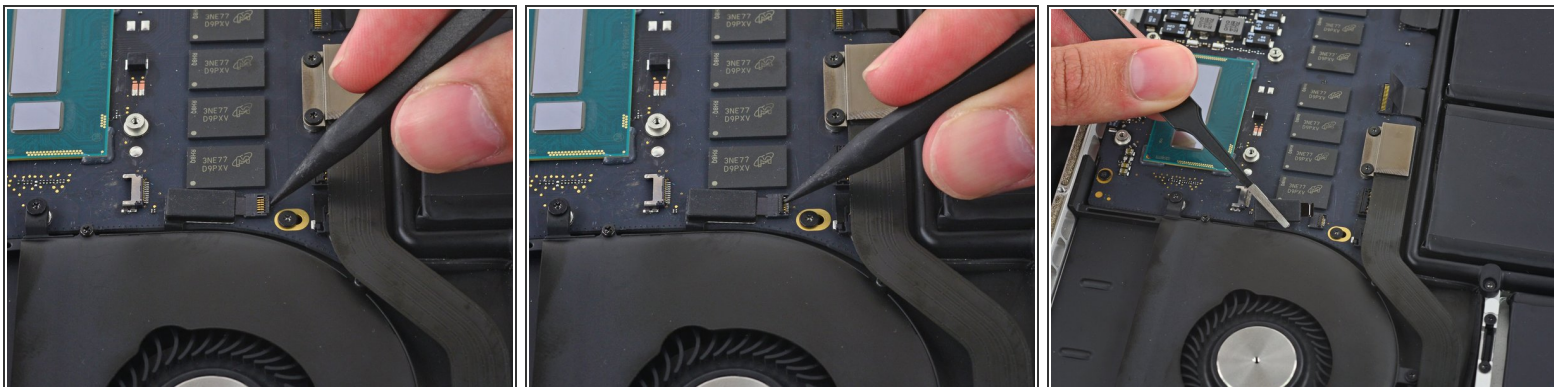
- Use the tip of a spudger to push on either side of the the iSight camera cable connector to *walk* it out of its socket on the logic board.

Step 12



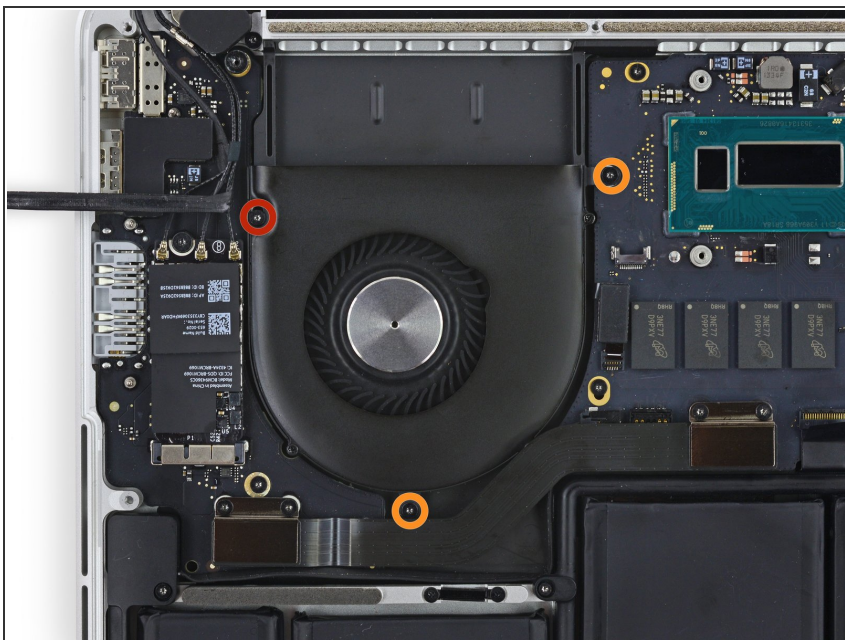
- Peel the iSight camera cable off the fan housing to fold it out of the way.

Step 13



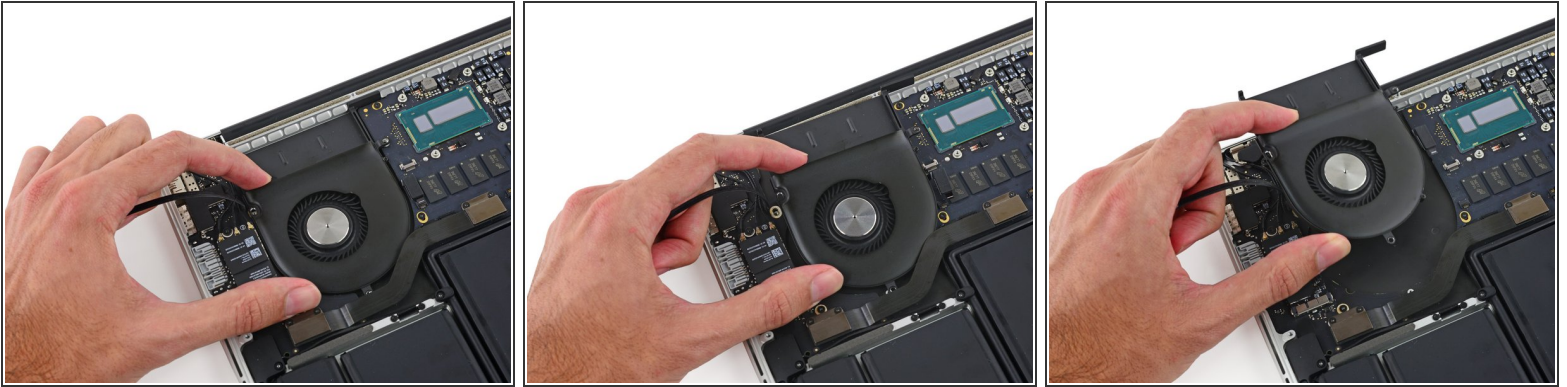
- Use the tip of a spudger to flip the tab on the fan's ZIF connector.
- Carefully pull the fan cable straight out of its socket.

Step 14



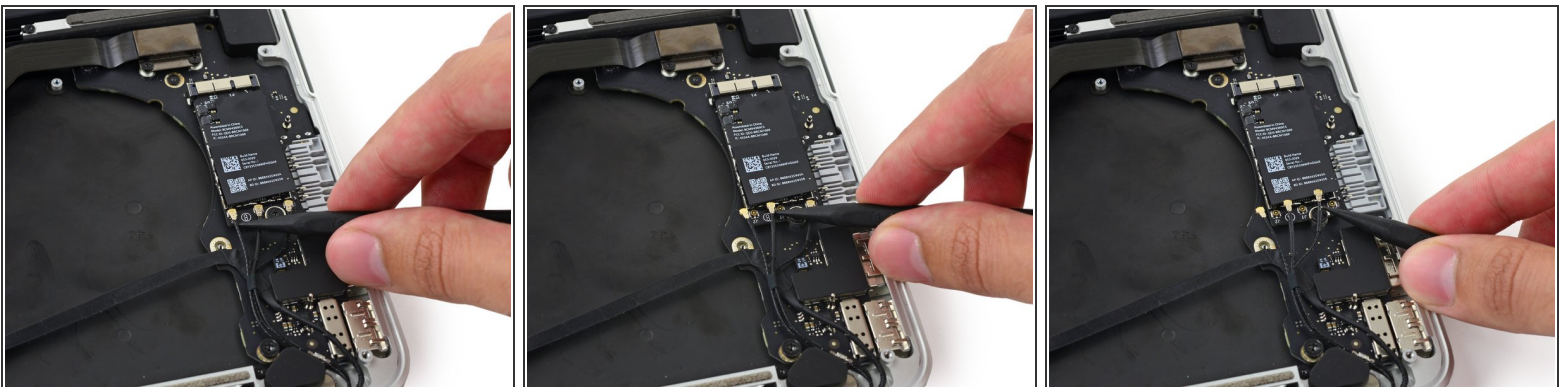
- Remove the following screws securing the fan to the upper case:
 - One 5.0 mm T5 Torx screw
 - Two 3.6 mm T5 Torx screws

Step 15



- Lift the end of the fan closest to the display hinge and remove the fan from the upper case.

Step 16 — I/O Board



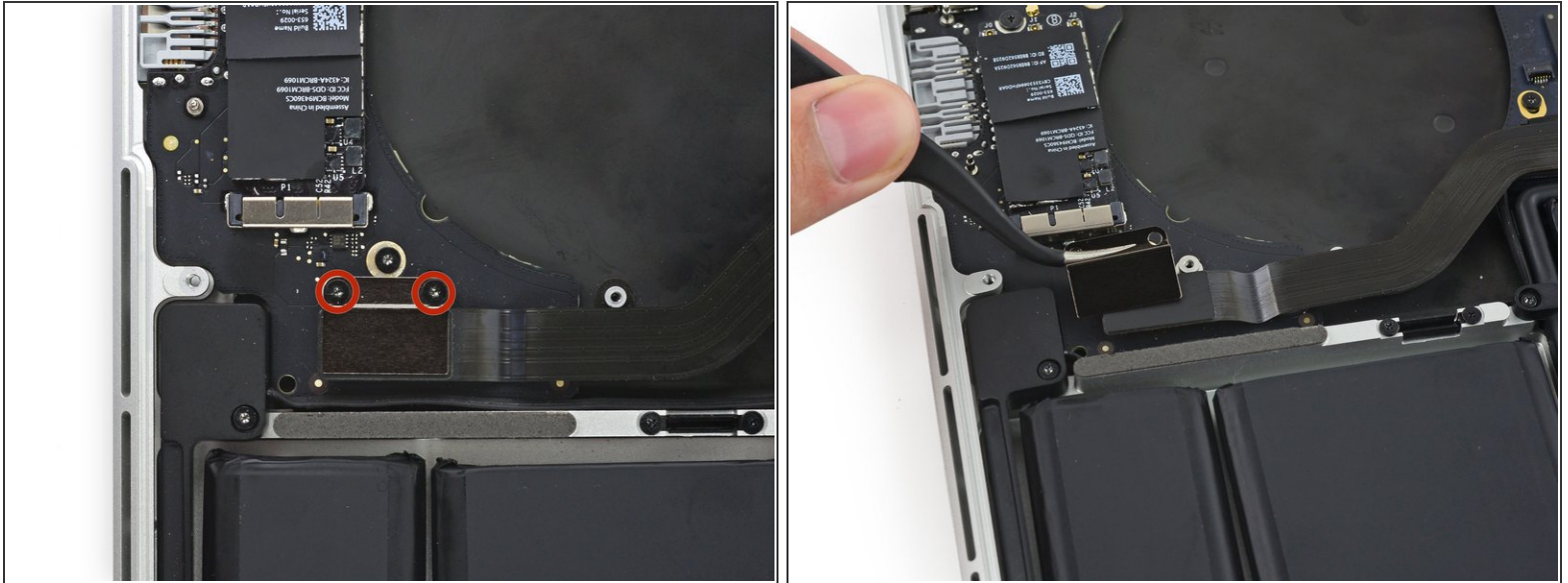
- Insert the tip of a spudger under each of the antenna cables near their connectors and pry up to disconnect them from the AirPort board.



The three cables are coded with black sleeves of different lengths. During reassembly:

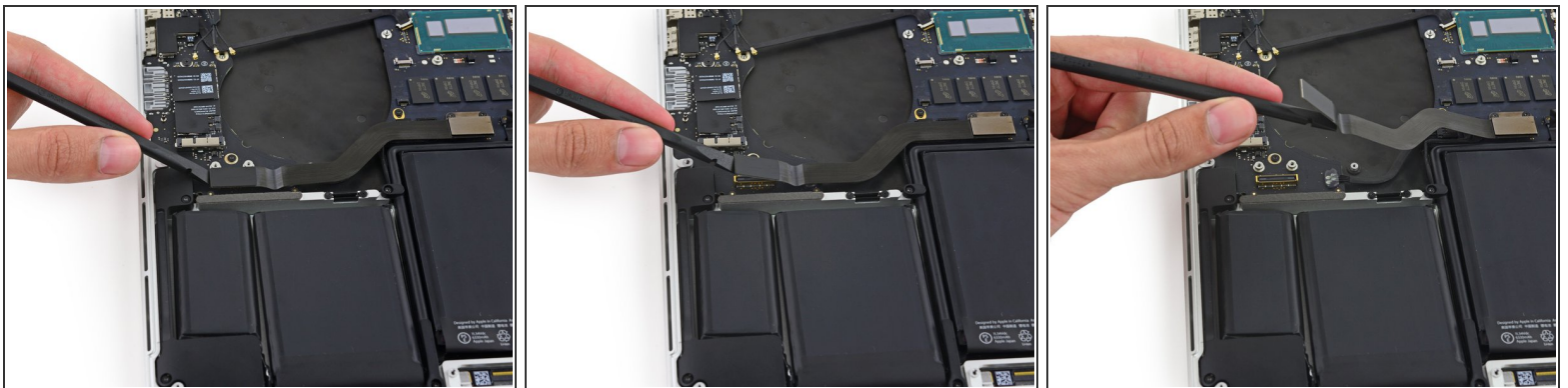
- Connect the long-sleeved cable to the center socket.
- The short-sleeved cable connects next to the screw.
- The remaining cable has no sleeve, and connects in the last empty socket, next to the fan.

Step 17



- Remove the two 2.1 mm T5 Torx screws securing the I/O board cable bracket.
- Remove the I/O board cable bracket.

Step 18



- Use the flat end of a spudger to pop the I/O board connector straight up off its socket on the I/O board.

⚠ Be careful to only pry up on the cable connector, **not** on the socket itself or you risk damaging your I/O board.

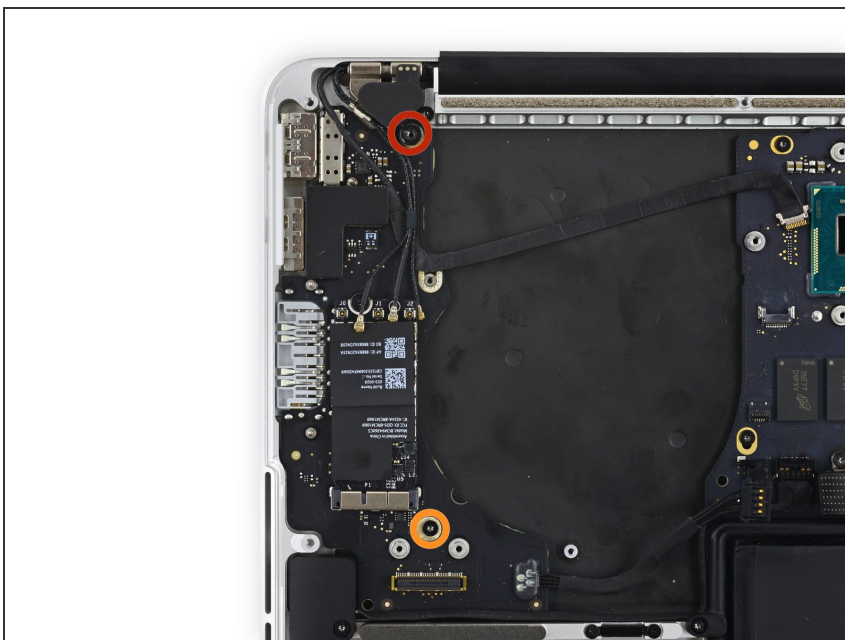
- Push the I/O board cable up to bend it out of the way.

Step 19



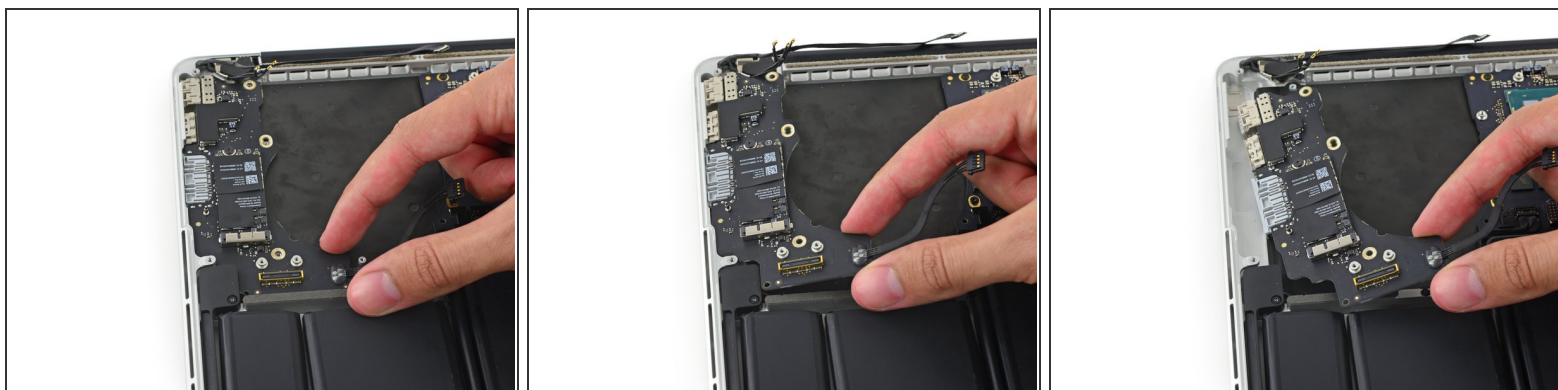
- Use the tip of a spudger to push on either side of the I/O board connector to *walk* it out of its socket on the logic board.

Step 20



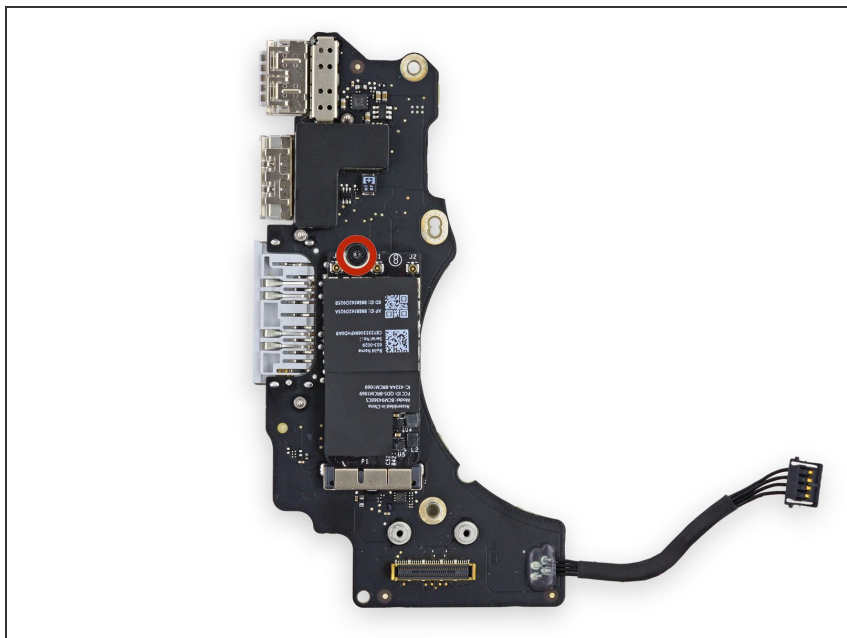
- Remove the following screws securing the I/O board to the upper case:
 - One 3.5 mm T8 Torx standoff screw
 - One 3.5 mm T5 Torx screw

Step 21



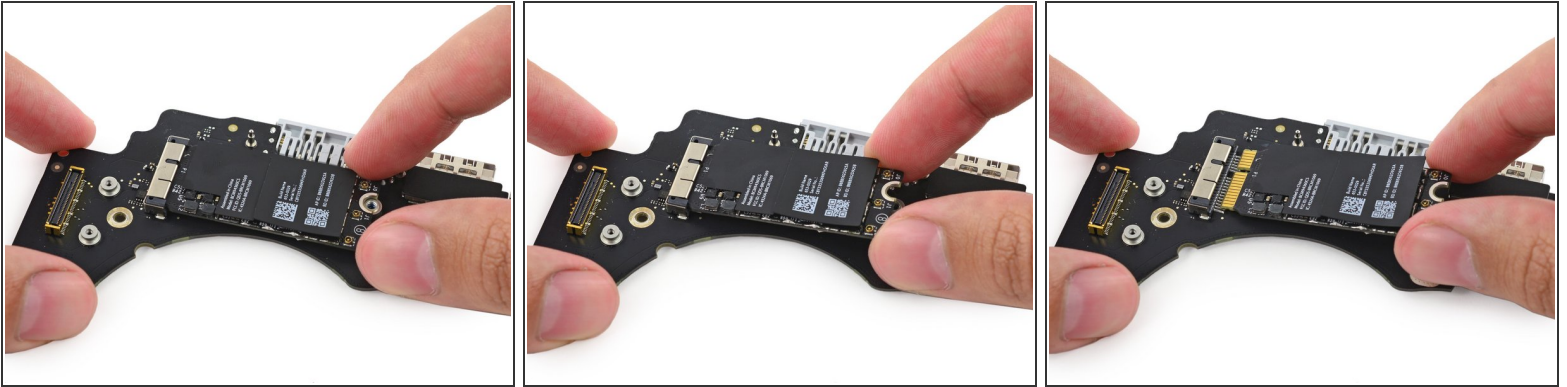
- Lift the I/O board cable end of the I/O board and pull toward the logic board to free the ports from the upper case.
- Remove the I/O board.

Step 22



- Remove the single 2.7 mm T5 Torx screw securing the AirPort board to the I/O board.

Step 23



- Lift the free end of the AirPort board up slightly and pull it straight out of its socket on the I/O board.

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