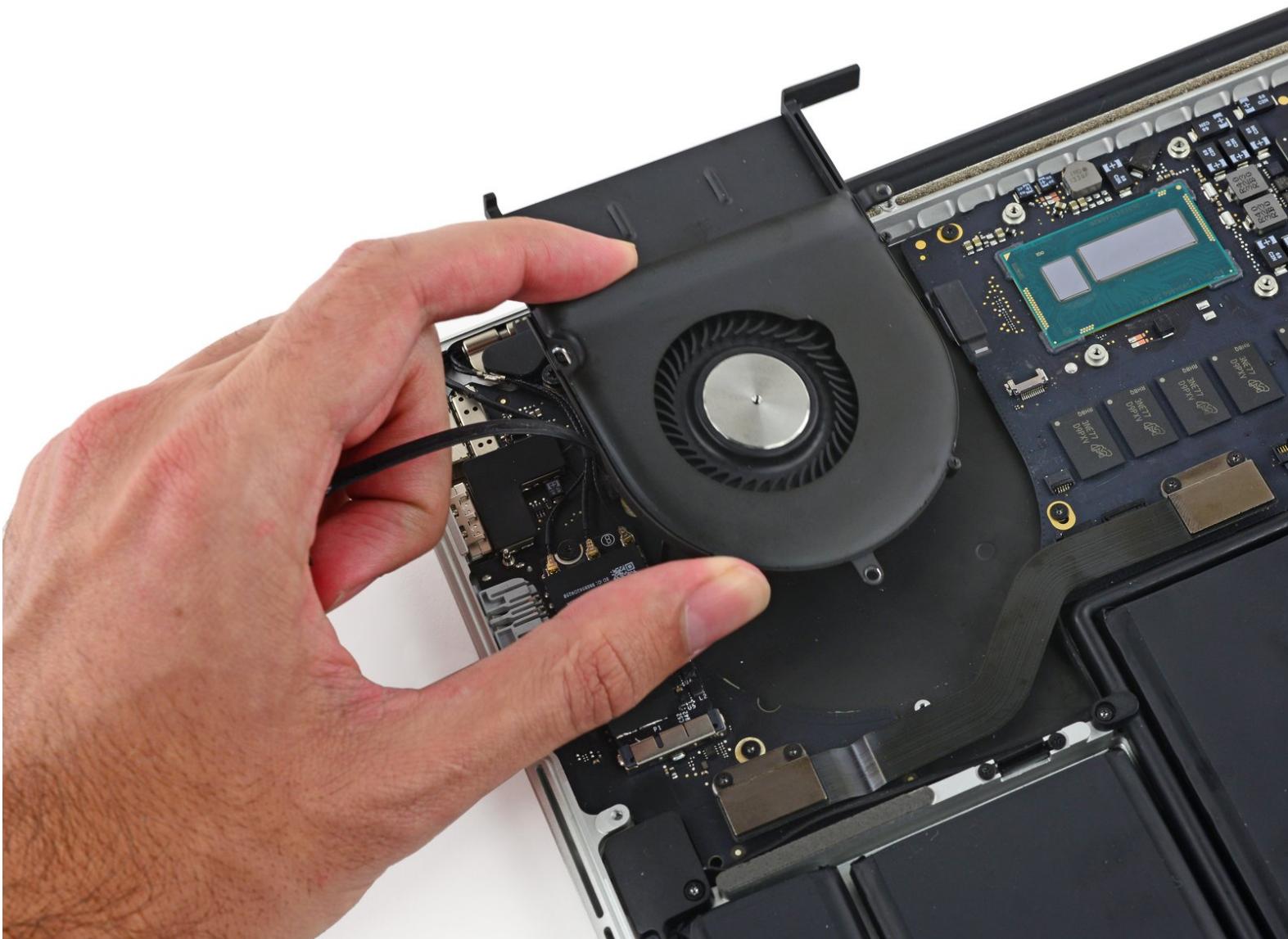




MacBook Pro 13" Retina Display Late 2013 Fan Replacement

Replace the Fan in your MacBook Pro 13" Retina Display Late 2013.

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INTRODUCTION

Use this guide to replace the fan.

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)

PARTS:

- MacBook Pro 13" Retina (Late 2013) Fan (1)

Step 1 — Lower Case



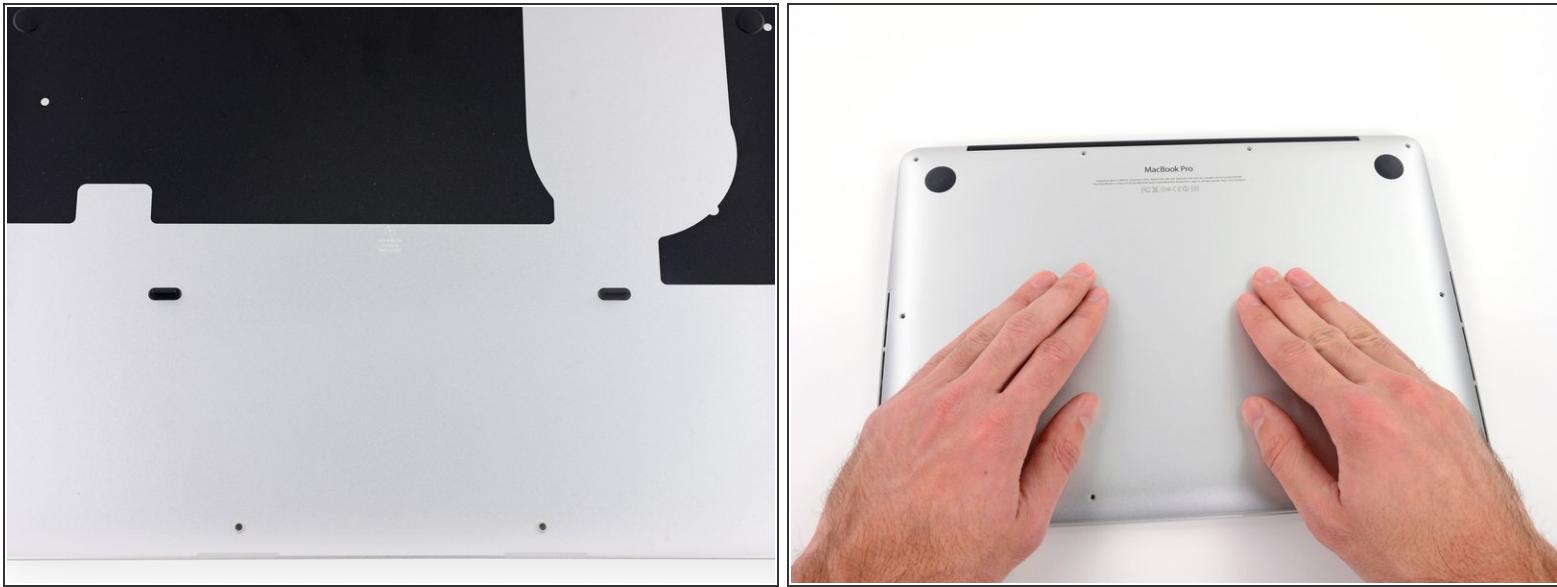
- Remove the following ten screws securing the lower case to the upper case:
 - Two 2.3 mm Pentalobe screws
 - Eight 3.0 mm Pentalobe screws
-  Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from to avoid damaging your device.

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



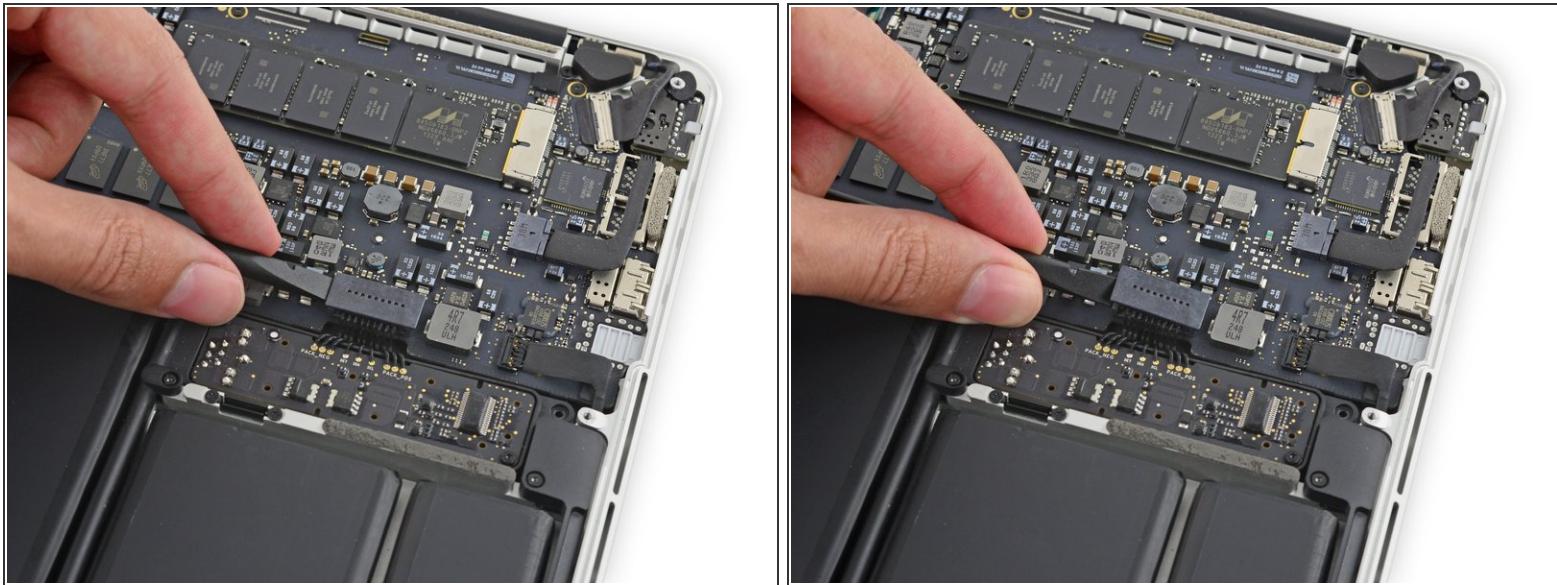
- ⓘ The lower case is connected to the upper case with two plastic clips near its center.
- ⚡ During reassembly, gently push down the center of the lower case to reattach the two plastic clips.

Step 4 — Battery Connector



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

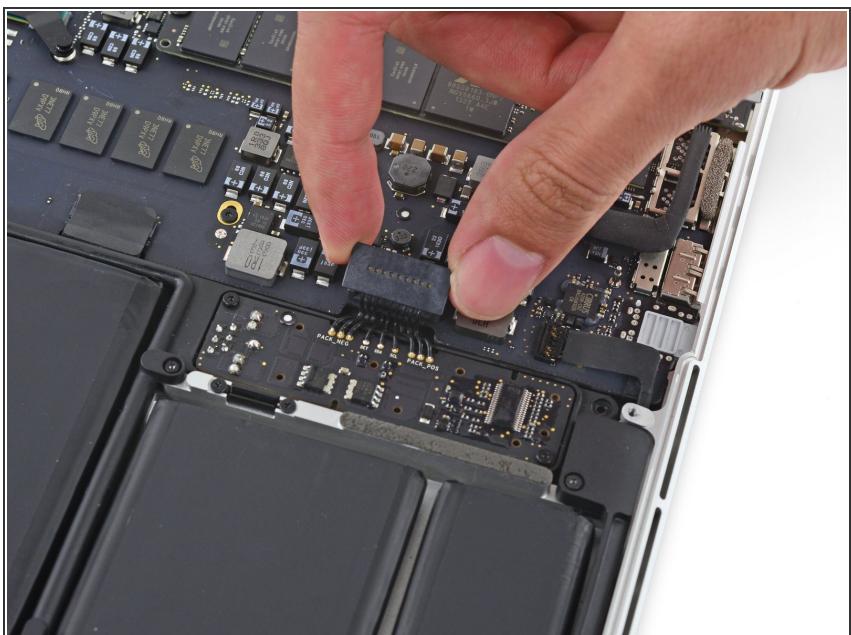
Step 5



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

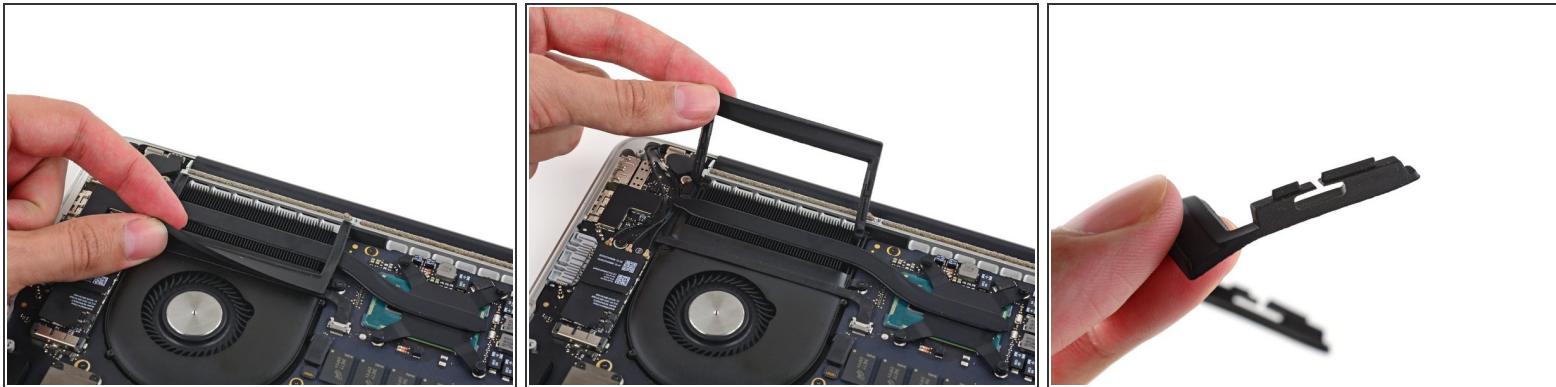
! Be sure you lift up only on the connector itself, **not** the socket, or you risk permanent damage to the logic board.

Step 6



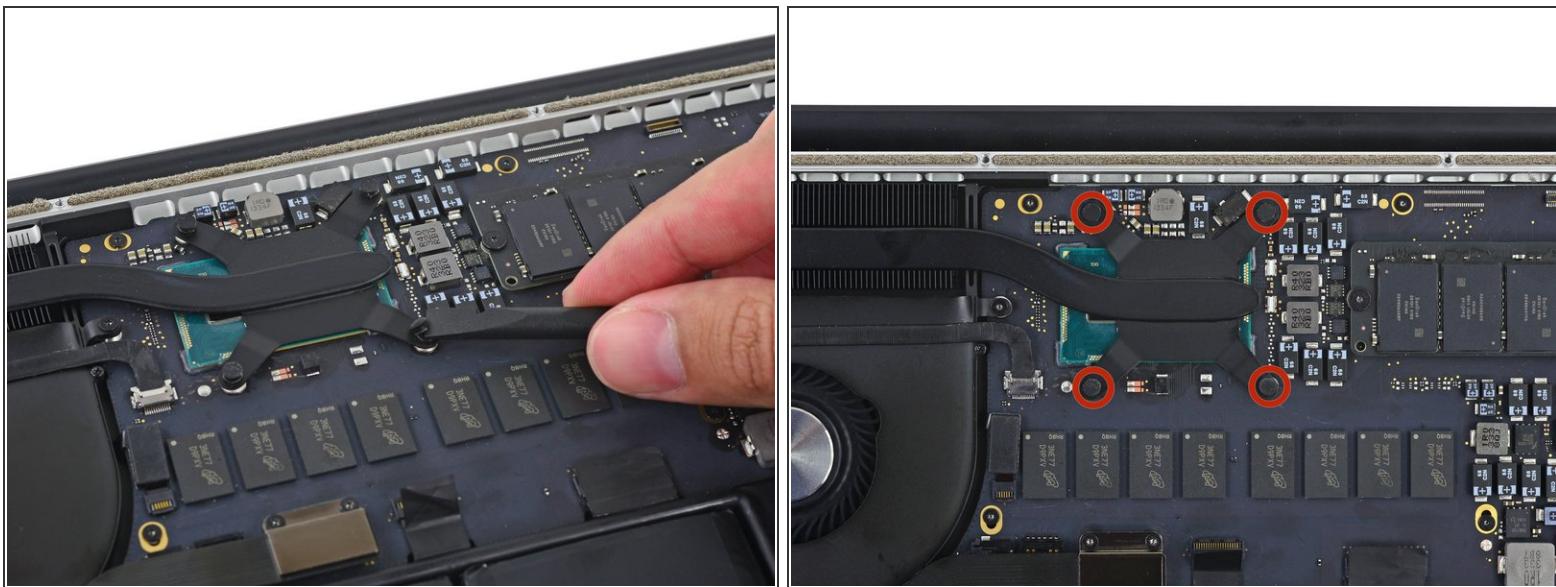
► Bend the battery connector up out of the way to prevent accidental contact with its socket during your repair.

Step 7 — Heat Sink



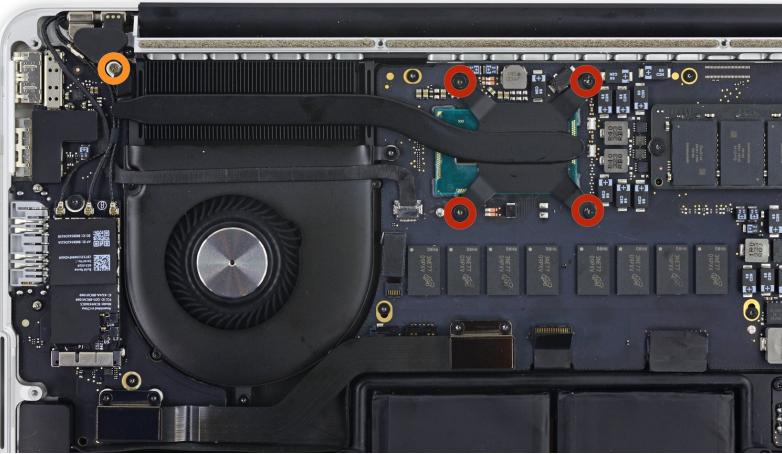
- Carefully remove the rubber fan bumper from the edge of the heat sink.
- ☒ The fan bumper wraps around the heat sink and fits into slots in the fan duct. During reassembly, be sure to fit the tabs into the notches in the fan duct.

Step 8



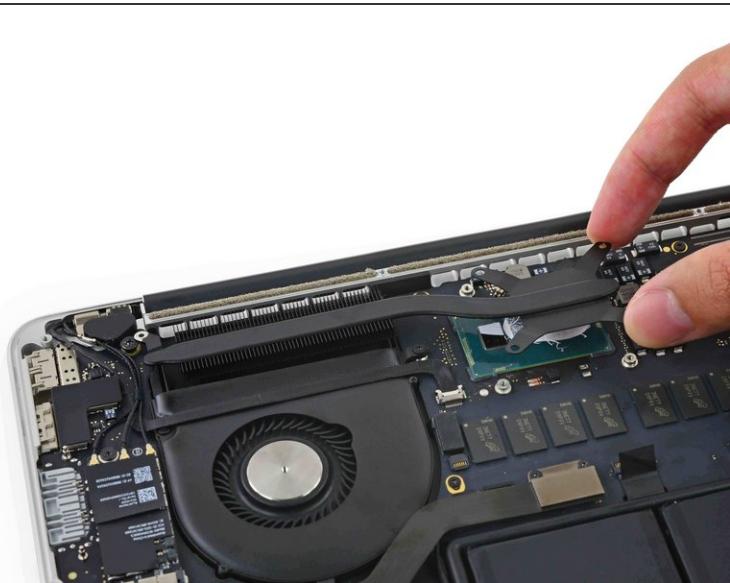
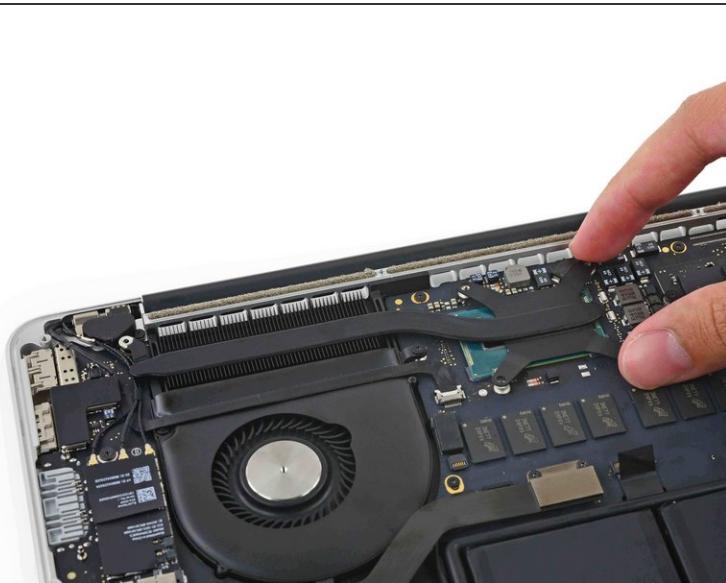
- Use the flat end of a spudger to peel the four foam stickers off of the heat sink screws.

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

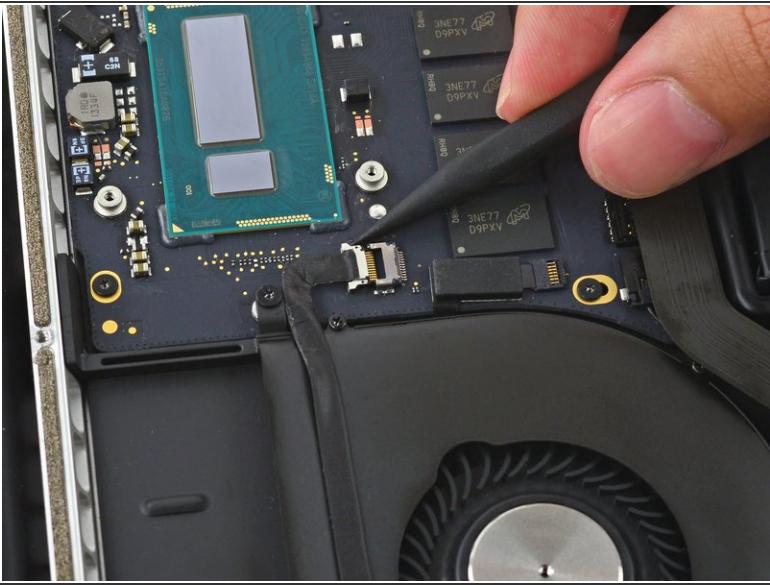
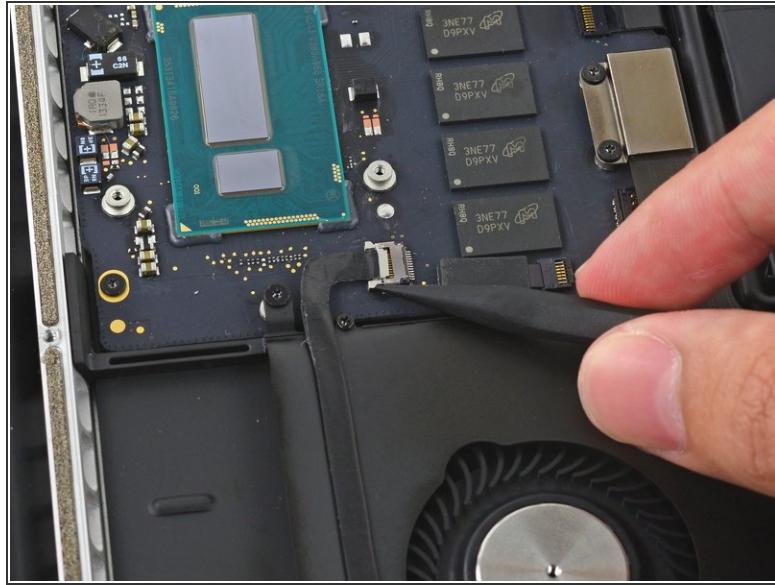
Step 10



- Remove the heat sink from the laptop.

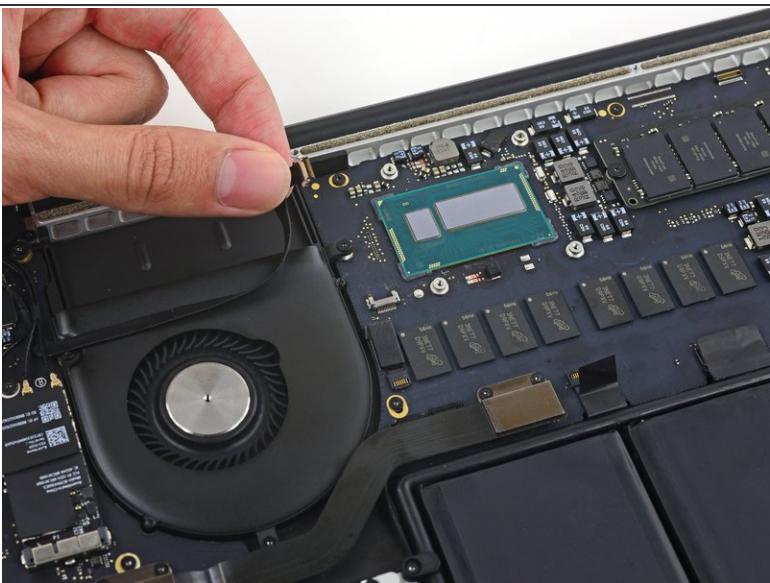
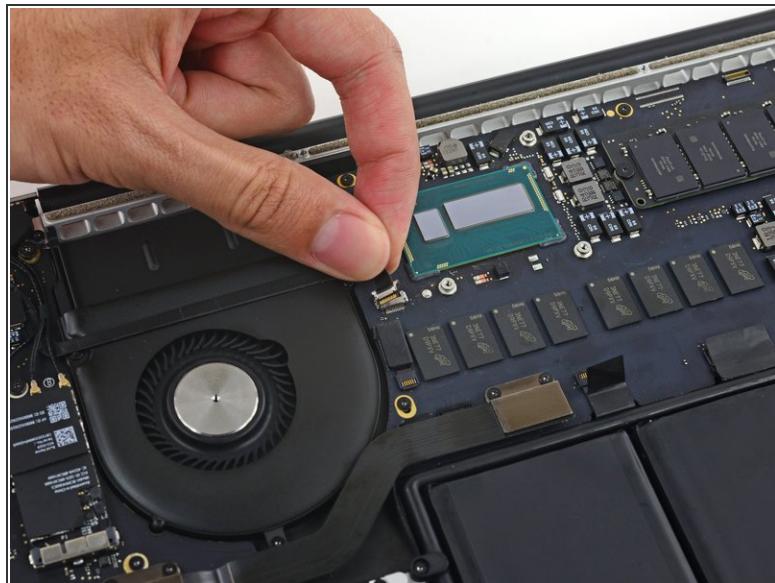
★ When reassembling your computer, follow our [thermal paste application guide](#) to reapply the thermal paste.

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



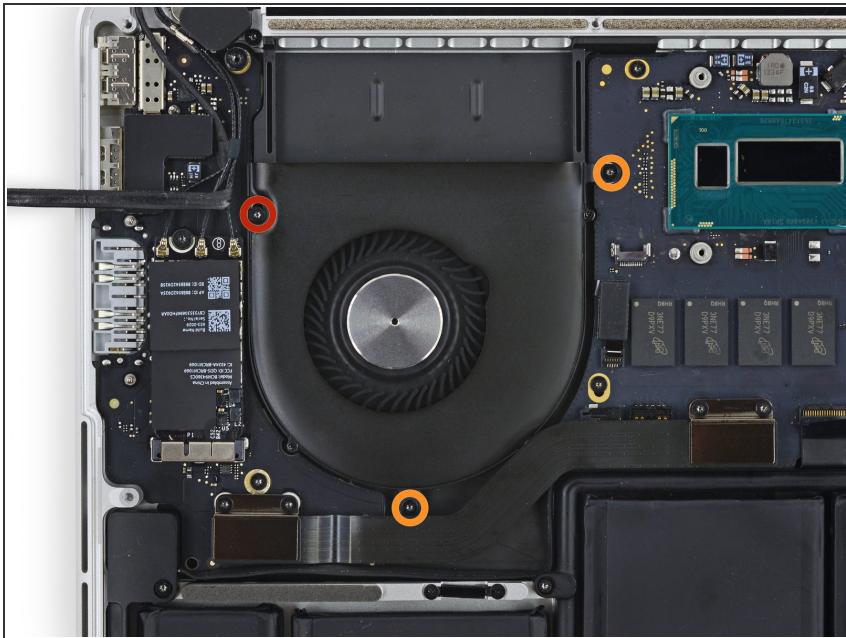
- Peel the iSight camera cable off the fan housing to fold it out of the way.

Step 13



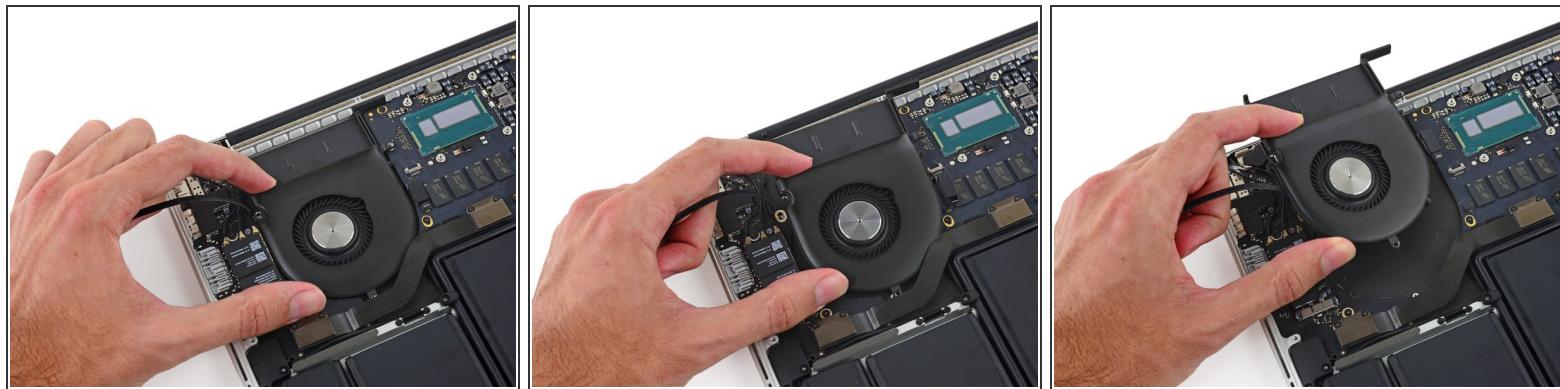
- Use the tip of a spudger to flip the tab on the fan's ZIF connector.
- Carefully pull the fan cable straight out of its socket.

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.

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