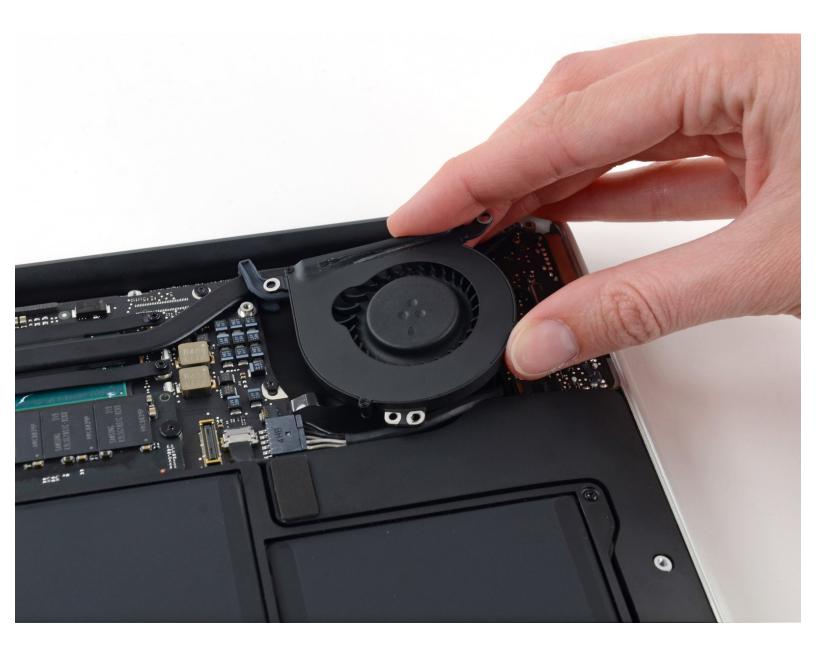


MacBook Air 13" Mid 2013 Fan Replacement

Use this guide to replace the fan.

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INTRODUCTION

Use this guide to replace the fan.

TOOLS:

P5 Pentalobe Screwdriver Retina MacBook
 Pro and Air (1)

- Spudger (1)
- T5 Torx Screwdriver (1)

PARTS:
MacBook Air 13" (Late 2010 to 2017) Fan (1)

Step 1 — Lower Case



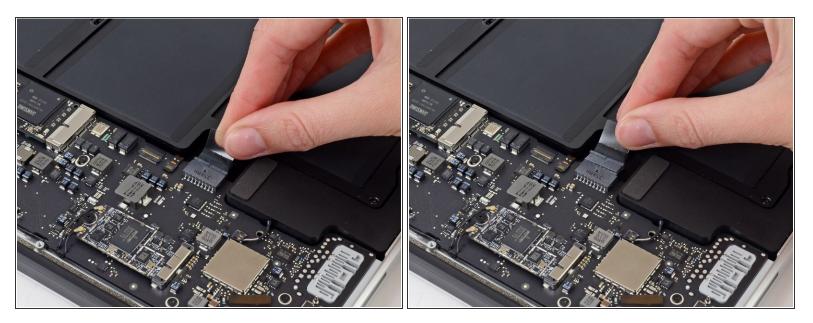
- (i) Before proceeding, power down your MacBook. Close the display and lay it on a soft surface, top-side down.
 - Use a <u>P5 Pentalobe</u> driver to remove ten screws securing the lower case, of the following lengths:
 - Two 9 mm screws
 - Eight 2.6 mm screws

Step 2



- Wedge your fingers between the display and the lower case and pull upward to pop the lower case off the Air.
- Remove the lower case and set it aside.

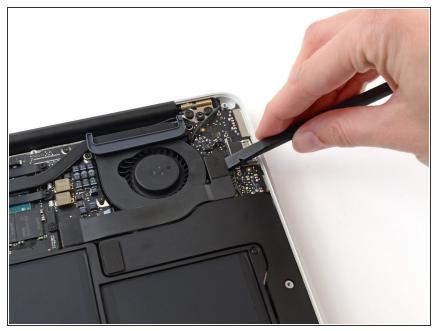
Step 3 — Battery Connector



- (i) To ensure that everything is de-energized and won't turn on while you're working, it is recommended that you disconnect the battery.
- Grab the clear plastic pull tab attached to the battery connector and pull it parallel to the board toward the front edge of the Air.

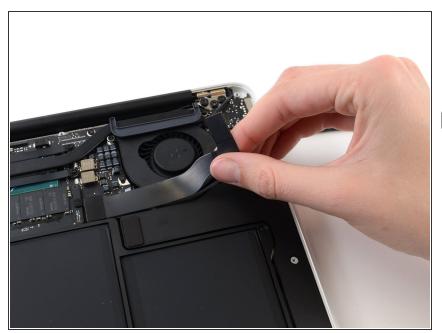
Do not lift upward on the connector as you disconnect it or you risk damage to the connector socket.

Step 4 — I/O Board Cable



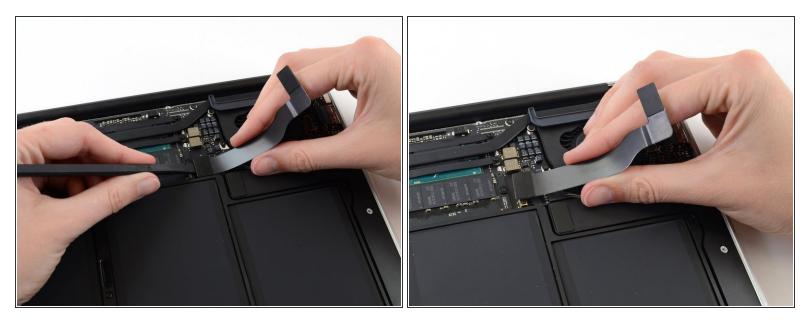
 Use the flat end of a spudger to pry the I/O board cable connector up out of its socket on the I/O board.

Step 5



- Carefully peel the I/O board cable from the adhesive securing it to the top of the fan.
- During reassembly, make sure this cable is in the correct orientation. It will fit if reversed, but the laptop will not boot.

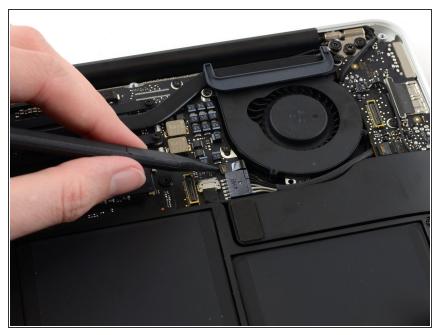
Step 6



A The following connector has an especially deep socket. Use care when disconnecting it.

- While gently pulling the I/O board cable upward near its connection to the logic board, use the flat end of a spudger to pry up on alternating sides of the connector to help "walk" it out of its socket.
- Remove the I/O board cable.

Step 7 — Fan



- Use the tip of a spudger to carefully flip up the retaining flap on the fan cable ZIF socket.
- Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

Step 8



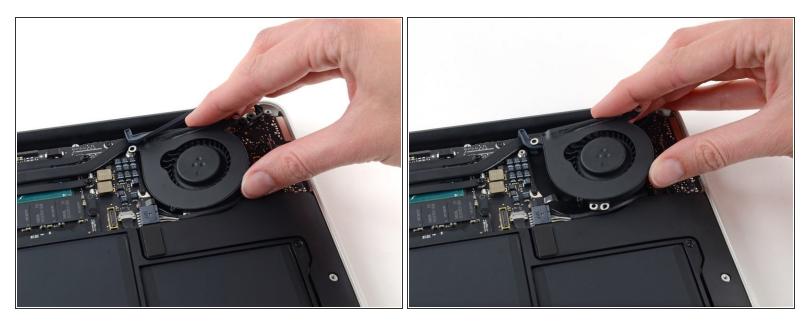
• Peel the rubber gasket off the adhesive on the top of the fan.

Step 9



- Remove the following three screws securing the fan to the upper case:
 - One 3.6 mm T5 Torx screw
 - One 2.7 mm T5 Torx screw
 - One 3.6 mm T5 Torx screw with a short head

Step 10



- Lift the fan from the I/O board side and pull it free from the upper case.
- Removing the fan will also disconnect the fan ribbon cable. Be careful not to snag it.

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