



MacBook Air 13" Early 2014 Fan Replacement

Use this guide to replace the fan.

Written By: Sam Goldheart



INTRODUCTION

Use this guide to replace the fan.



TOOLS:

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



PARTS:

[MacBook Air 13" \(Late 2010 to 2017\)](#)
[Fan](#) (1)

Step 1 — Lower Case



Before proceeding, power down your MacBook. Close the display and lay it on a soft surface, top-side down.

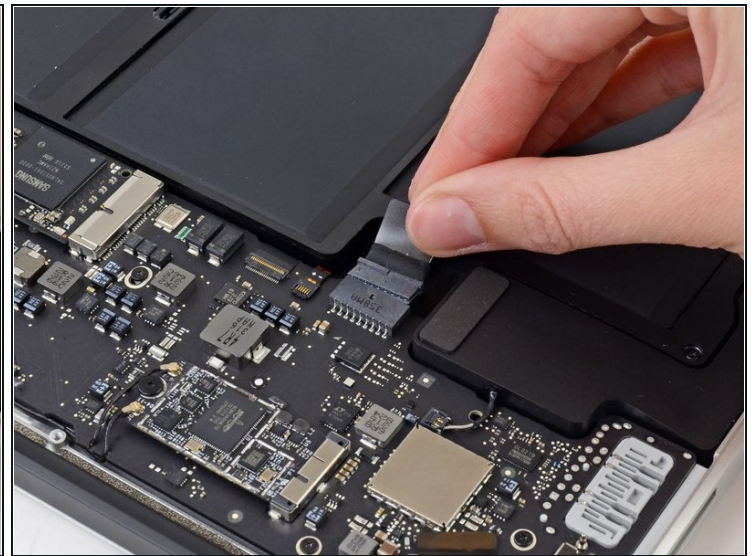
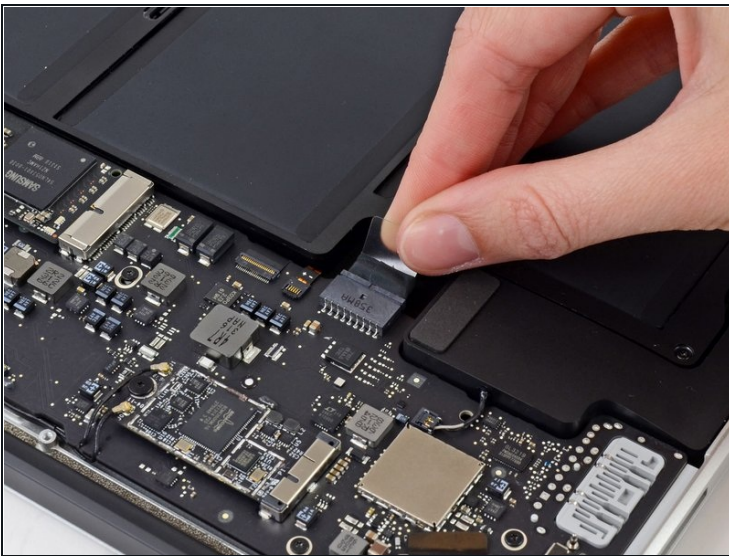
- Use a [P5 Pentalobe](#) driver to remove ten screws securing the lower case, of the following lengths:
 - Two 9 mm screws
 - Eight 2.6 mm screws

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

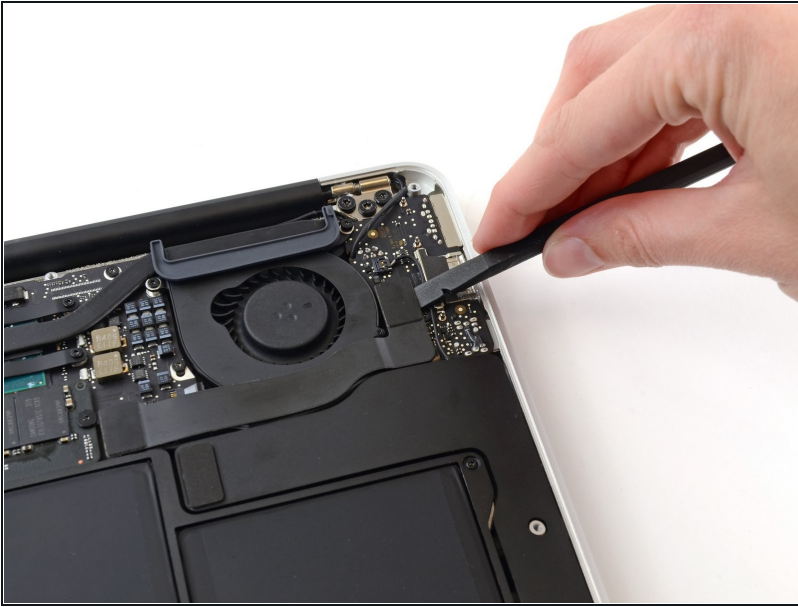


ⓘ To ensure that everything is de-energized and won't turn on while you're working, it is recommended that you disconnect the battery.

- 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



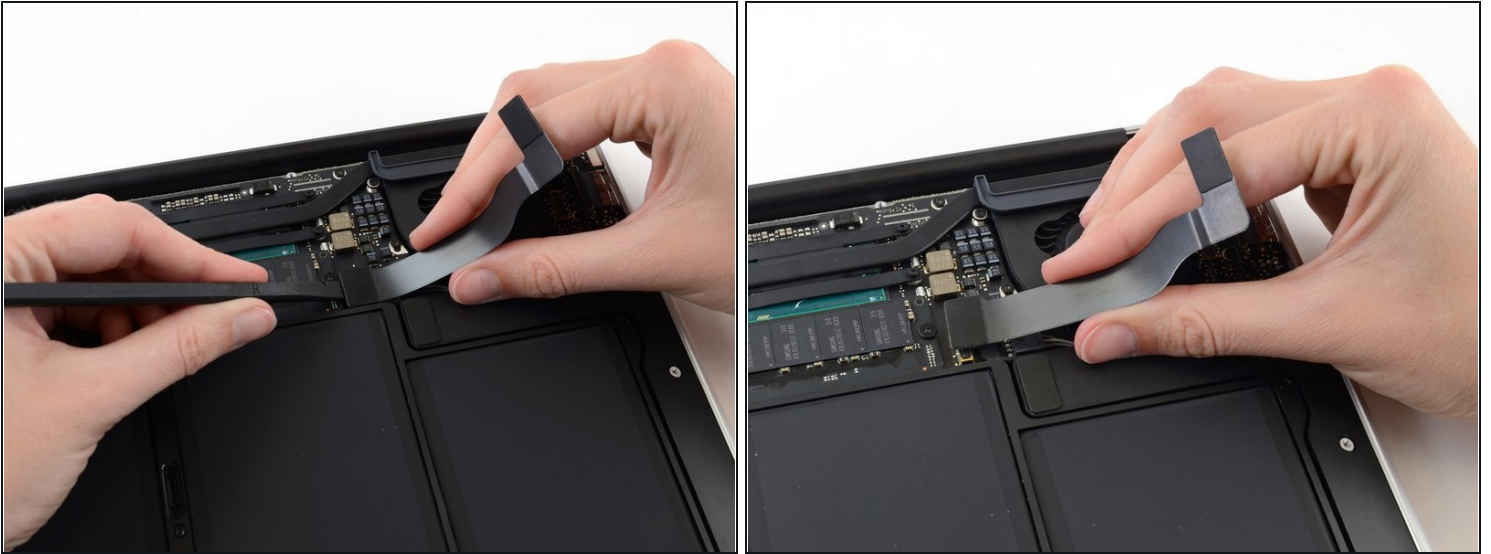
- Use the flat end of a spudger to pry the I/O board cable connector up out of its socket on the I/O board.

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.

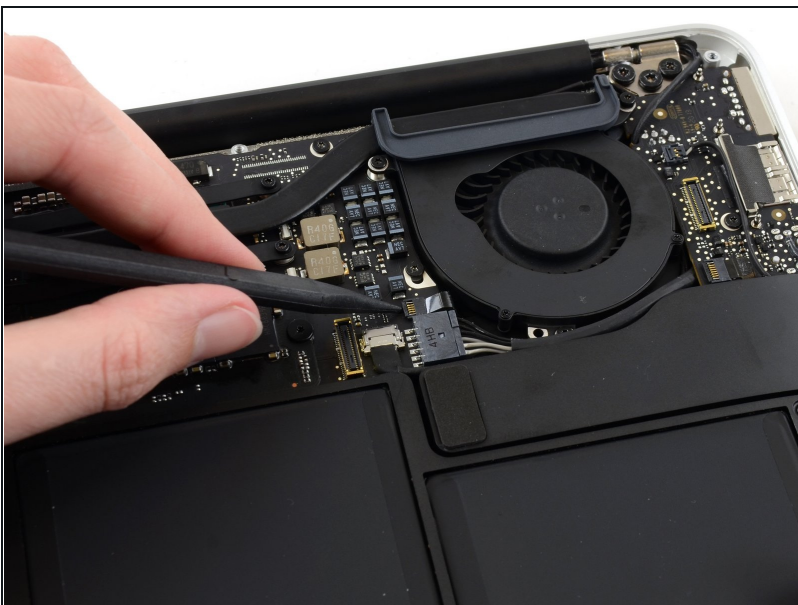
Step 6



⚠ 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



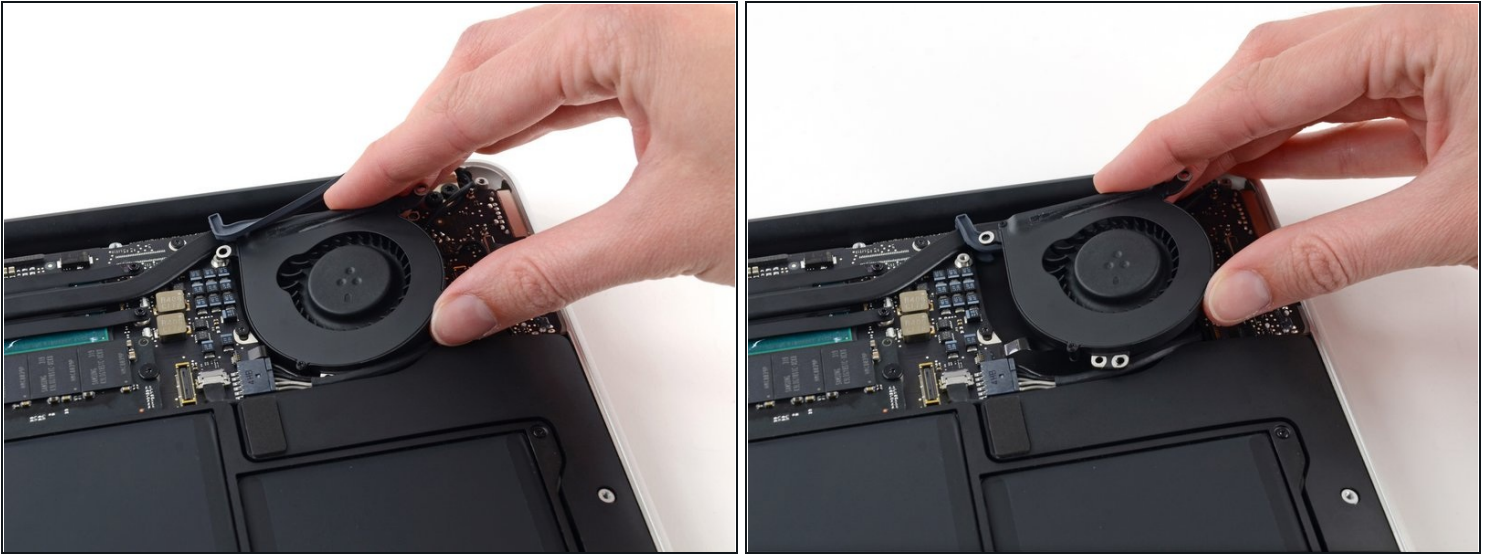
- Peel the rubber gasket off the adhesive on the top of the fan.

Step 9



- Remove the following three screws securing the fan to the upper case:
 - One 5.4 mm T5 Torx screw
 - One 3.3 mm T5 Torx screw
 - One 4.6 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.
 - ① If you feel resistance as you remove the fan, carefully disconnect its cable using a pair of [tweezers](#).

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