



MacBook Air 13" Mid 2012 Fan Replacement

Use this guide to replace a dead or noisy fan.

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INTRODUCTION

Use this guide to replace a dead or noisy 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



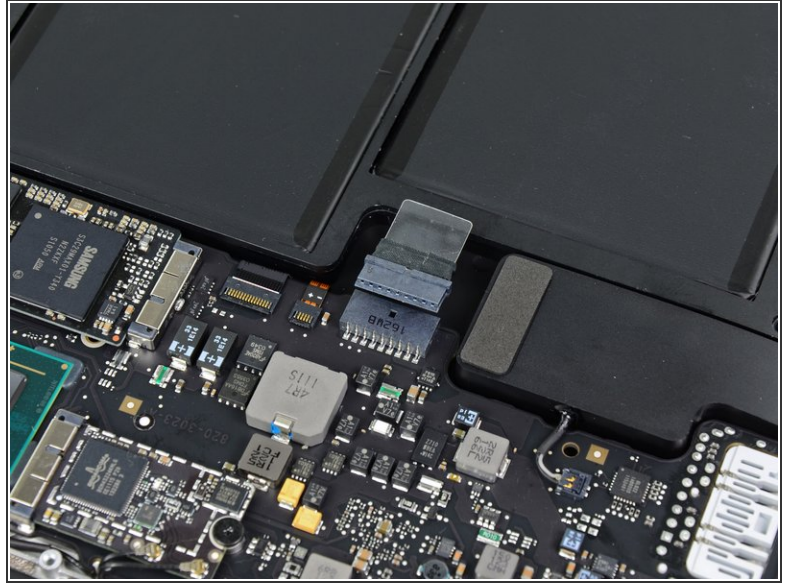
- **i** Before proceeding, power down your MacBook. Close the display and lay it on a soft surface, top-side down.
- Use a [P5 Pentalobe](#) driver to remove ten screws securing the lower case, of the following lengths:
 - Two 9 mm screws
 - Eight 2.6 mm screws

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



- ⓘ As a precaution against accidental discharge or shock, disconnect the battery connector from the logic board.
- Grab the clear plastic pull tab attached to the battery connector and pull it toward the front edge of the Air to disconnect the battery from the logic board.
- ⚠ Be sure to pull the connector horizontally toward the battery, and not straight up from the Air, or you may damage the socket on the logic board.

Step 4 — I/O Board Cable



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

Step 5



- Carefully peel the I/O board cable from the top of the fan.

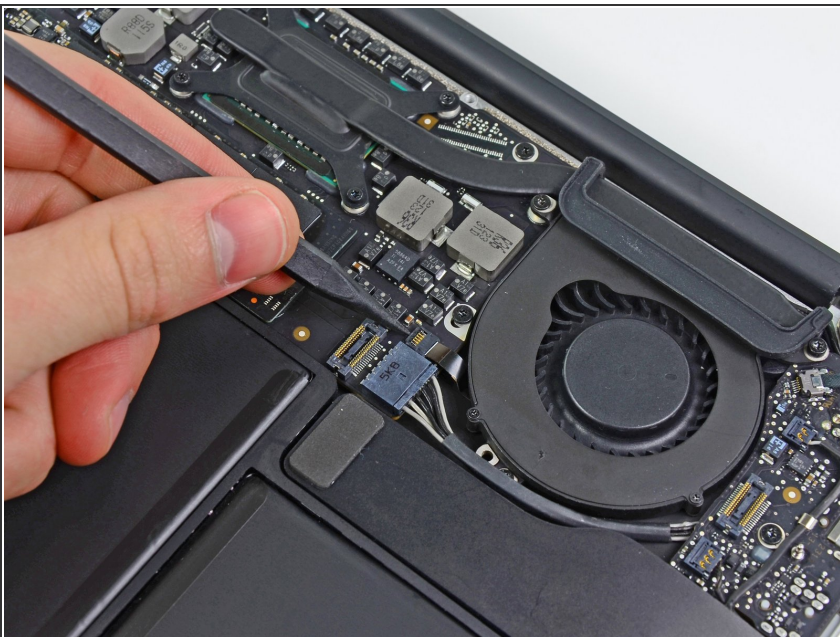
Step 6



⚠ 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 tip of a spudger to pry upward 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.

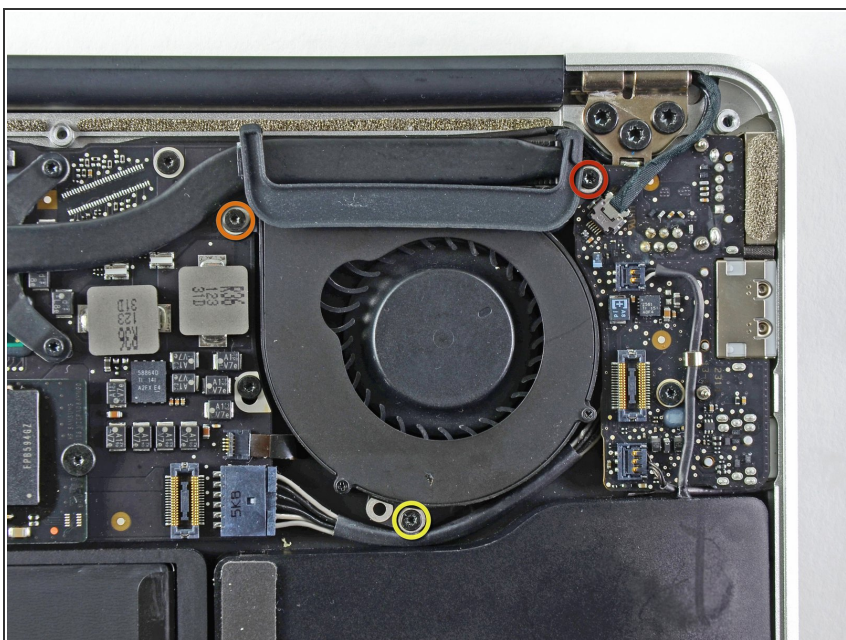
⚠ Be sure you are prying up on the hinged retaining flap, **not** the socket itself.

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 out of the upper case and carefully pull the fan ribbon cable out of its socket as you remove it from the Air.

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