

MacBook Air 13" Early 2015 SSD Upgrade to NVMe

(1) May cause kernel Panic with hibernation on...

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INTRODUCTION

- May cause kernel Panic with hibernation on certain MBA, this guide applies to Early 2015 model only*
- The 2015 MBA only has 4 PCI-e lanes so you will not be able to take full advantage of NVMe drives*



TOOLS:

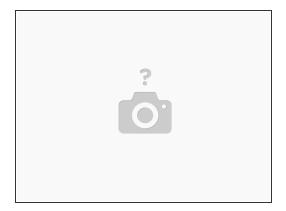
- P5 Pentalobe Screwdriver Retina MacBook Pro and Air (1)
- T5 Torx Screwdriver (1)



PARTS:

- Crucial P1 1TB 3D NAND NVMe PCIe M.2 SSD (1)
- M.2 NGFF M-Key SSD Convert Card to Nvme PCI-E (1)

Step 1 — Check Compatibility



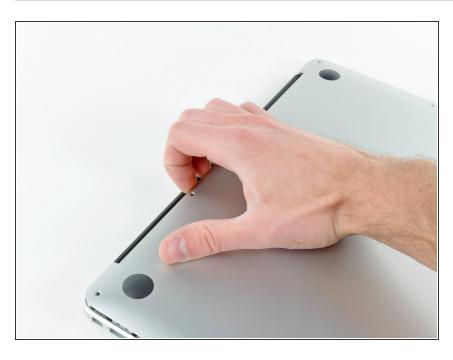
- MacBook Air Late 2010 Working High Sierra, Catalina, M2 Samsung Evo 860, Adapter
- MacBook Air 2011 Unknown
- MacBook Air 2012 Unknown
- MacBook Air 2013 Unknown
- MacBook Air 2014 WD_black 500 + Sintech adapter, running MacOS Big Sur
- MacBook Air Early 2015 WORKING- Mojave 10.14.3 to Big Sur 11.0.1- Crucial P1 SSD NVME,
 Adapter.
- MacBook Air 2017 WORKING High Sierra, Catalina and Big Sur Samsung Evo 960, Adapter.
- MacBook Air 2018 and forward will not work, No removable drive

Step 2 — Lower Case



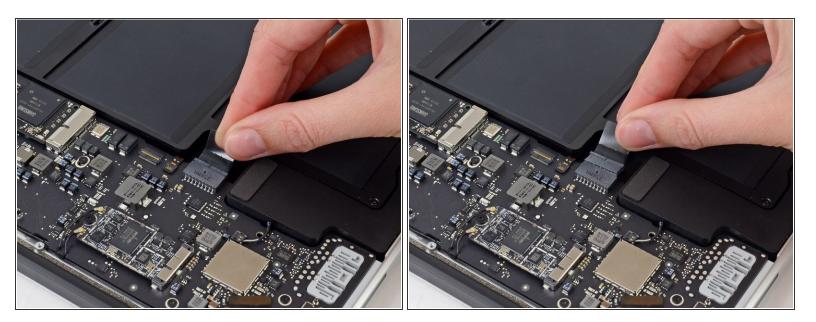
- Before proceeding, power down your MacBook. Close the display and lay it on a soft surface, top-side down.
- Use a <u>P5 Pentalobe</u> driver to remove ten screws securing the lower case, of the following lengths:
 - Two 9 mm screws
 - Eight 2.6 mm screws

Step 3



- 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 4 — **Battery Connector**



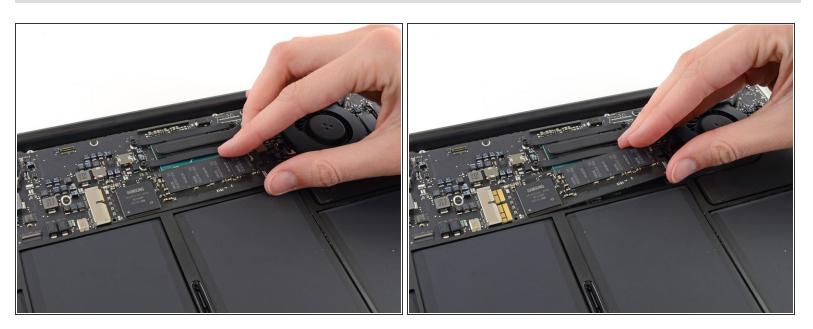
- (i) To ensure that everything is de-energized and won't turn on while you're working, it is recommended that you disconnect the battery.
- Grab the clear plastic pull tab attached to the battery connector and pull it parallel to the board toward the front edge of the Air.
- ♠ Do not lift upward on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

Step 5 — Solid-State Drive



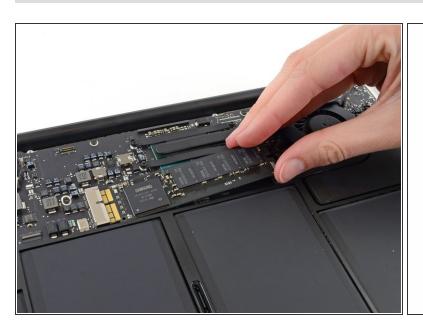
 Remove the single 2.9 mm T5 Torx screw securing the SSD to the logic board.

Step 6



- Gently lift the end of the SSD about half an inch and pull it straight out of its socket on the logic board.
 - ♠ Don't lift the SSD more than half an inch—doing so may damage the SSD or its socket on the logic board.
- Mhen reinstalling the SSD, be sure it is properly seated before reinstalling its retaining screw.

Step 7 — SSD - Alternate option using M.2 NVMe SSD





- Carefully insert the new SSD into the adapter, using the length of old drive as a reference for when the SSD is fully in the adapter. The lengths should be the same.
- Insert the SSD and the adapter into the Socket, pushing inward in a straight fashion.
- When reinstalling the SSD, be sure it is properly seated before reinstalling its retaining screw.
- NVMe Drives can cause kernel panics due to sleep /hibernation issues. This can be turned off with the following command.
- From a Terminal, use the following command to disable hibernation: ----"sudo pmset -a hibernatemode 0" ---- If you later want to enable hibernation, use: "sudo pmset -a hibernatemode 3"

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