



# MacBook Air 11" Mid 2012 Heat Sink Replacement

Replace the heat sink on your Mid 2011 MacBook Air 11".

Written By: Andrew Optimus Goldheart



# INTRODUCTION

Use this guide to replace a damaged heat sink or to reapply thermal paste.



## TOOLS:

- [Arctic Silver ArctiClean](#) (1)
- [Arctic Silver Thermal Paste](#) (1)
- [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
- [Spudger](#) (1)
- [T5 Torx Screwdriver](#) (1)



## PARTS:

- [MacBook Air 11" \(Mid 2011/Mid 2012\) Heat Sink](#) (1)

## Step 1 — Lower Case



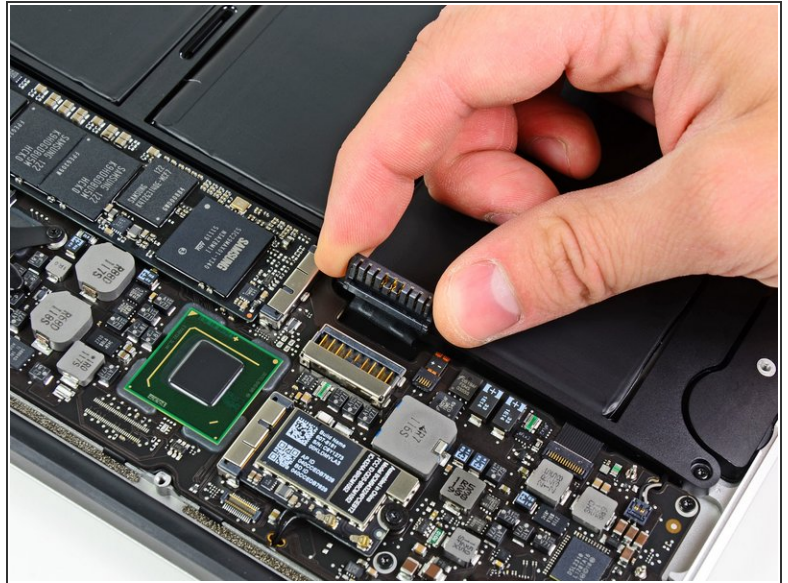
- ❗ Shut down and close your computer. Lay it on a soft surface top-side down.
- Remove the following ten screws:
  - Two 8 mm 5-point Pentalobe screws
  - Eight 2.5 mm 5-point Pentalobe screws
- ❗ The special screwdriver needed to remove the 5-point Pentalobe screws can be found [here](#).


## Step 2



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

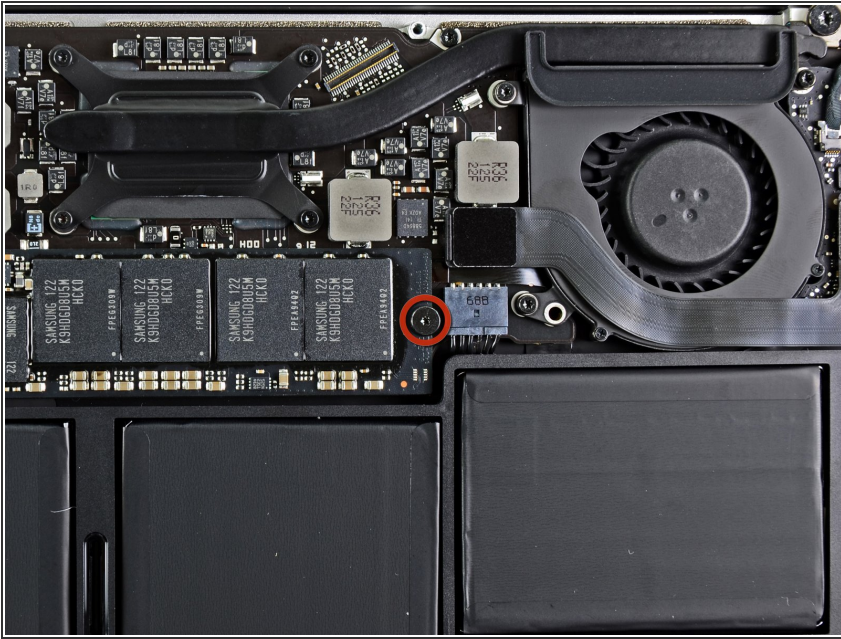
## Step 3 — Battery



 In this step you will disconnect the battery to help avoid shorting out any components during service.

- Use the flat end of a spudger to pry both short sides of the battery connector upward to disconnect it from its socket on the logic board.
- Bend the battery cable slightly away from the logic board so the connector will not accidentally contact its socket.

## Step 4 — Solid-State Drive




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

## Step 5



- Use a spudger to help lift the free end of the SSD just enough to grab it with your other hand.

 Do not lift the end of the SSD excessively.

- Pull the drive straight out of its socket and remove it from the logic board.

 When reinstalling the SSD, be sure it is properly seated before reinstalling its retaining screw.

## Step 6 — I/O Board Cable



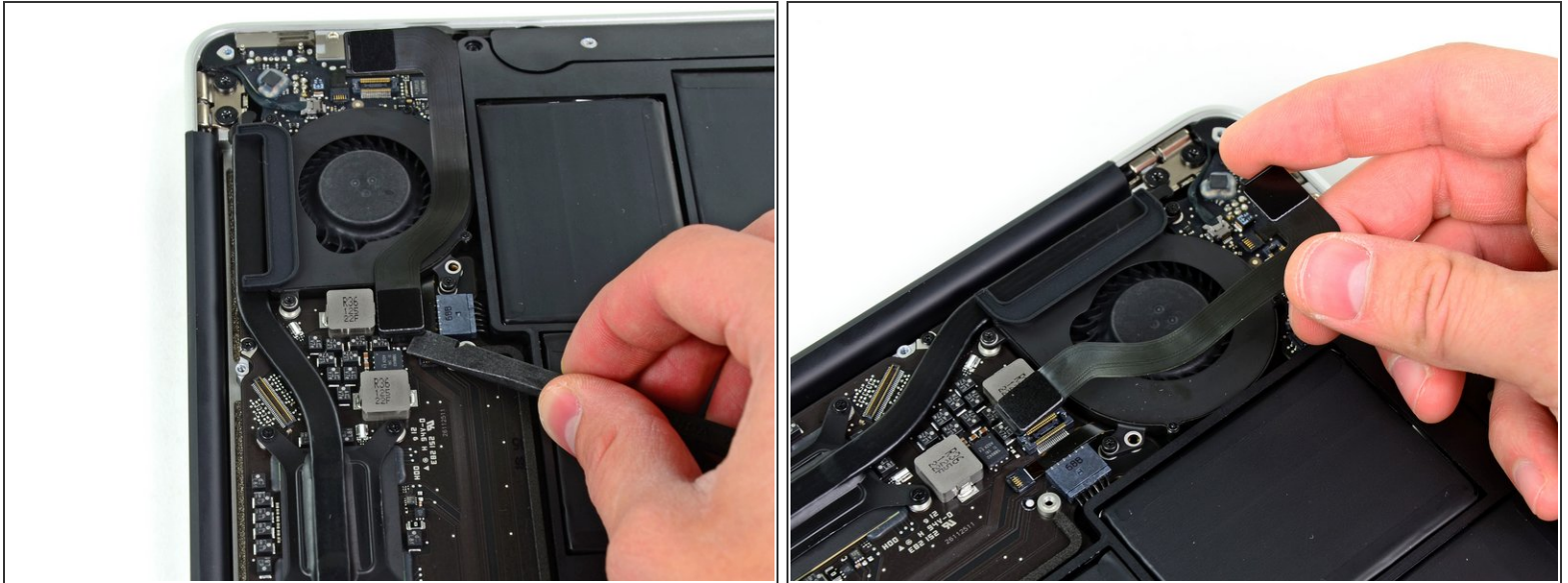
- Use the flat end of a spudger to pry the I/O board cable up from its socket on the I/O board.

## Step 7



- Peel the I/O board cable up from the adhesive securing it to the fan.

## Step 8



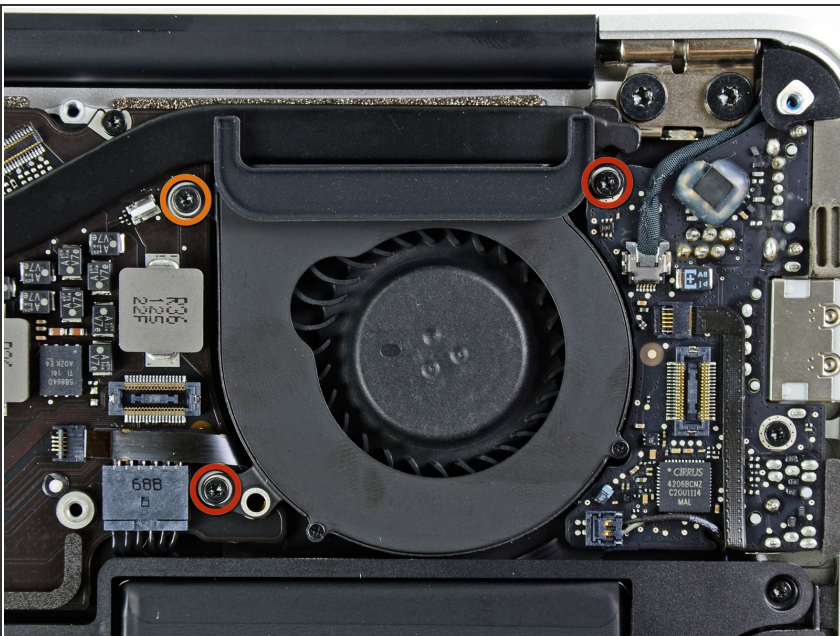
- Use the flat end of a spudger to lift the I/O board connector up and out of its socket on the logic board
- ⚠ Be sure to lift straight up on the connector as you disconnect it from its socket. The socket is very deep on the logic board and prying it from side to side may damage the logic board
- Remove the I/O board cable.

## Step 9 — 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 10



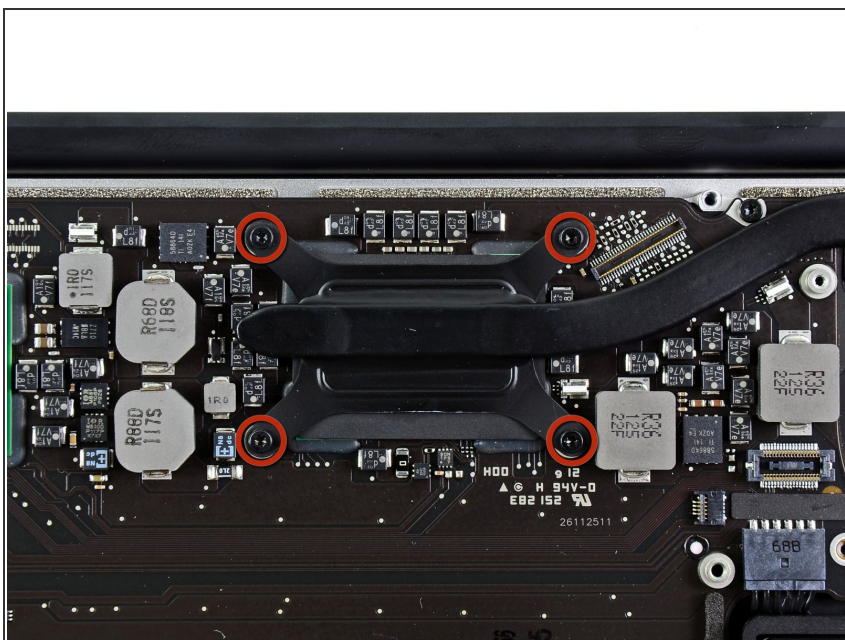
- Remove the following three screws securing the fan to the upper case:
  - Two 5.2 mm T5 Torx screws
  - One 3.6 mm T5 Torx screw

## Step 11



- 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.

## Step 12 — Heat Sink



- Remove the four 2.5 mm T5 Torx screws securing the heat sink to the logic board.

## Step 13



- ❗ If the heat sink seems to be stuck to the logic board after removing all four screws, use a spudger to carefully separate the heat sink from the faces of the CPU and GPU.
- Remove the heat sink from the logic board.
- When reinstalling the heat sink, be sure to apply a new layer of [thermal paste](#). If you have never applied thermal paste before, we have a [guide](#) that makes it easy.

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