



# Installing Mac Mini Late 2012 Dual Hard Drive Kit

Install a second hard drive in your late 2012 Mac Mini.

Written By: Andrew Optimus Goldheart



## INTRODUCTION

Use this guide to install iFixit's Dual Hard Drive Kit in your Late 2012 Mac Mini.

### TOOLS:

- [T6 Torx Screwdriver](#) (1)
- [Spudger](#) (1)
- [T8 Torx Screwdriver](#) (1)
- [Mac Mini Logic Board Removal Tool](#) (1)

### PARTS:

- [Mac Mini Dual Hard Drive Kit](#) (1)
- [250 GB SSD](#) (1)
- [500 GB SSD](#) (1)
- [1 TB SSD](#) (1)

## Step 1 — Bottom Cover



- Place your thumbs in the depressions cut into the bottom cover.
- Rotate the bottom cover counter-clockwise until the white dot painted on the bottom cover is aligned with the ring inscribed on the outer case.
- *(i)* You do not need to apply much downward pressure while turning.

## Step 2



- Tilt the mini enough to allow the bottom cover to fall away from the outer case.
- Remove the bottom cover and set it aside.

## Step 3 — Fan



- Remove the two 11.3 mm T6 Torx screws securing the fan to the logic board near the antenna plate.

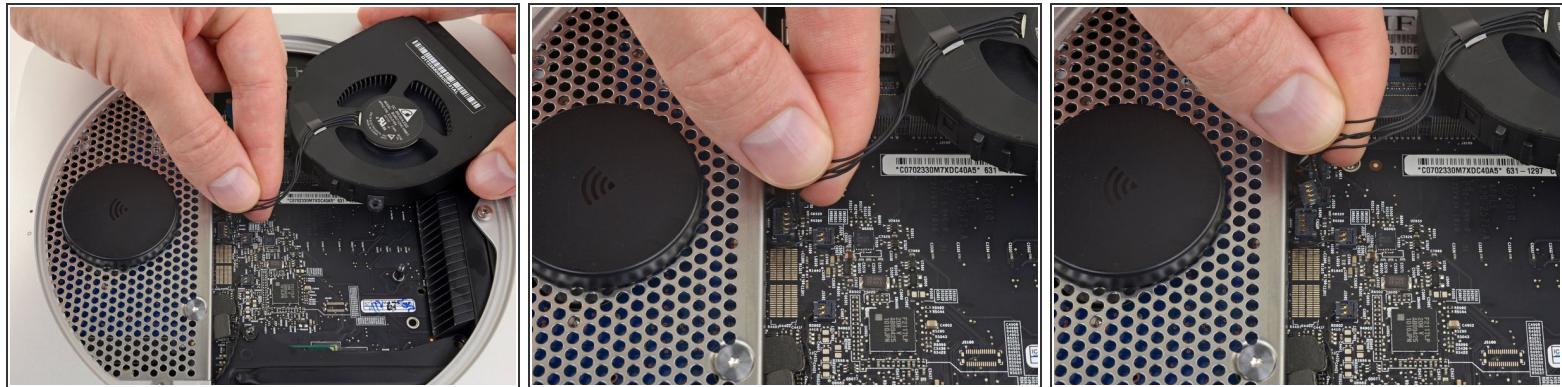
## Step 4



- Lift the ear of the fan nearest the RAM up off the standoff secured to the outer case.

*Removing the standoff screw is not necessary to remove the fan. You need only raise the fan enough to lift it off the standoff screw.*

## Step 5



- Lift the fan out of the mini for enough clearance to access its connector.
- Grab all the wires at once and gently pull straight up to disconnect the fan from the logic board.
- ⚠ Do not pry at the socket, or you may rip it from the logic board.**
- Remove the fan.

## Step 6 — Cowling



- Remove the single 3.5 mm T6 Torx screw securing the cowling to the heat sink.

## Step 7



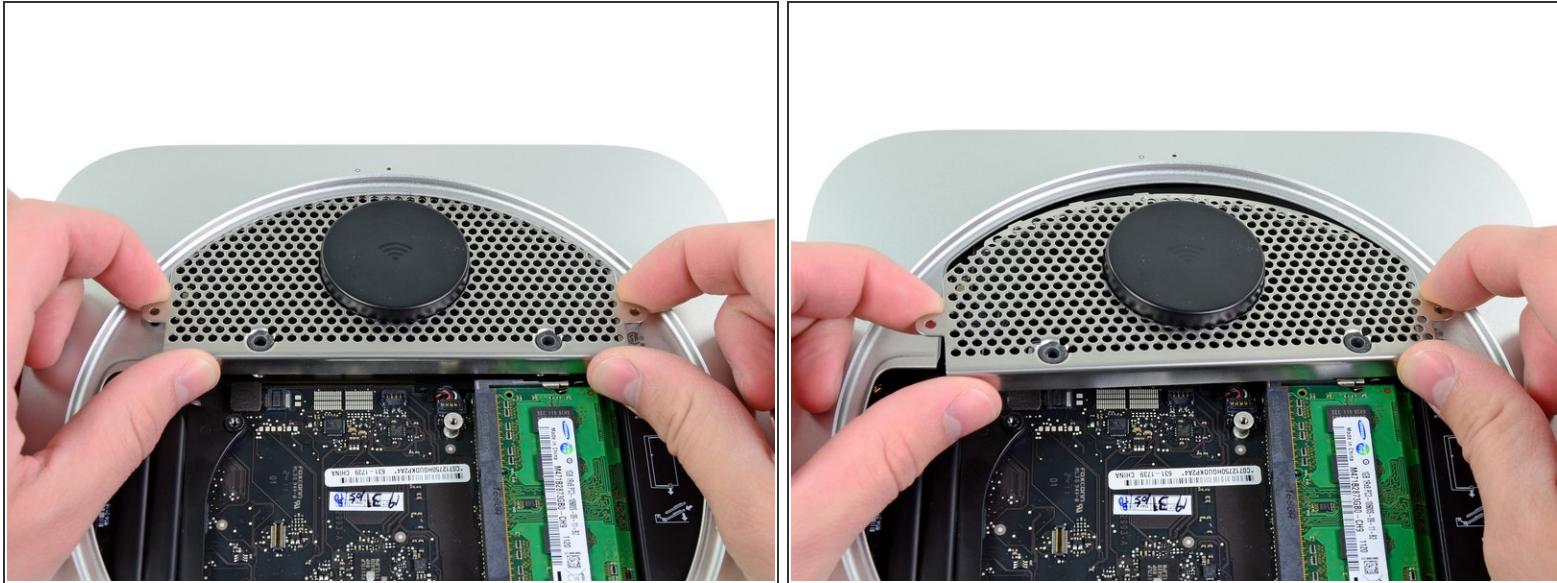
- Lift the cowling from the end nearest the antenna plate.
- Rotate the cowling away from the outer case and remove it from the mini.

## Step 8 — Antenna Plate



- Remove the following screws securing the antenna plate to the mini:
  - Two 6.6 mm T8 Torx screws
  - Two 5.0 mm T8 Torx or 2.0 mm Hex screws (either screwdriver will work)
- When putting back together:
  - **i** It can be difficult to get the hard drive seated correctly such that the antenna plate fits in place correctly. If the screw holes don't line up with those on the hard drive, make sure that the two pins that are in the back of the hard drive are properly seated in the holes at the back of the case, above the housing for the second hard drive.
  - **!** The antenna attaches directly to the hard drive (red markers), therefore attaching the antenna can move the hard drive around and loosen the connection of the hard drive cable to the logic board.

## Step 9



- Slightly lift the antenna plate from the end closest to the RAM.
- Carefully pull the antenna plate away from the circular rim of the outer case.

**⚠** Do not remove the antenna plate yet. It is still attached to the AirPort/ Bluetooth board.

## Step 10



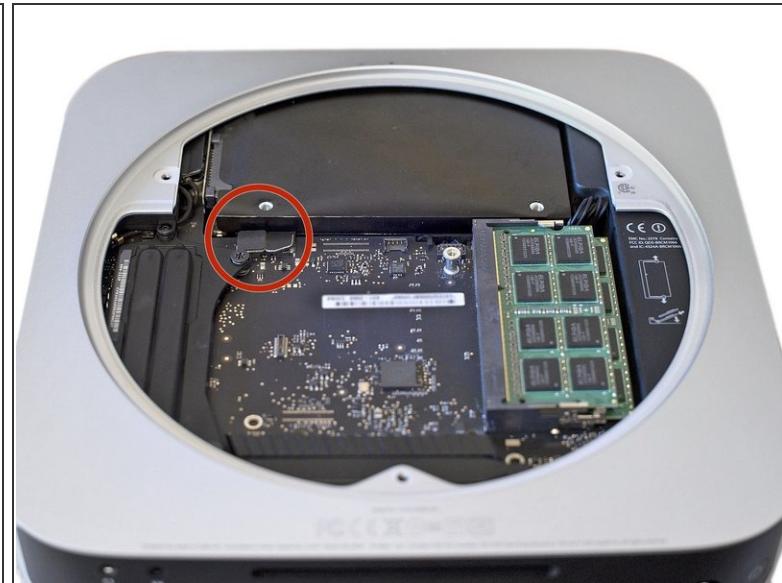
- Use the tip of a spudger to carefully pry the antenna connector up from its socket on the AirPort/Bluetooth board.

## Step 11



- Remove the antenna plate from the mini.

## Step 12 — Logic Board



- Use the flat end of a spudger to pry the hard drive connector up from its socket on the logic board.

## Step 13



- Use the tip of a spudger to lift the IR sensor connector up and out of its socket on the logic board.

**⚠** Make sure to pry up from beneath the wires and not underneath the socket.

## Step 14



- Remove the following three screws:
  - One 5.0 mm T8 Torx or 2.0 mm Hex screw (either screwdriver will work)
  - One 16.2 mm T6 Torx screw
  - One 26 mm T6 Torx standoff

## Step 15



**⚠** To remove the logic board, the two cylindrical rods of the Mac mini Logic Board Removal Tool must be inserted into the holes highlighted in red. Inserting instruments into any logic board holes other than the ones highlighted in red may destroy the logic board.

- Insert the [Mac mini Logic Board Removal Tool](#) into the two holes highlighted in red. Be sure it makes contact with the top side of outer case below the logic board before proceeding.
- Carefully pull the tool toward the I/O board. The logic board and I/O board assembly should slightly slide out of the outer case.

**i** Cease prying when the I/O board is visibly separated from the outer case.

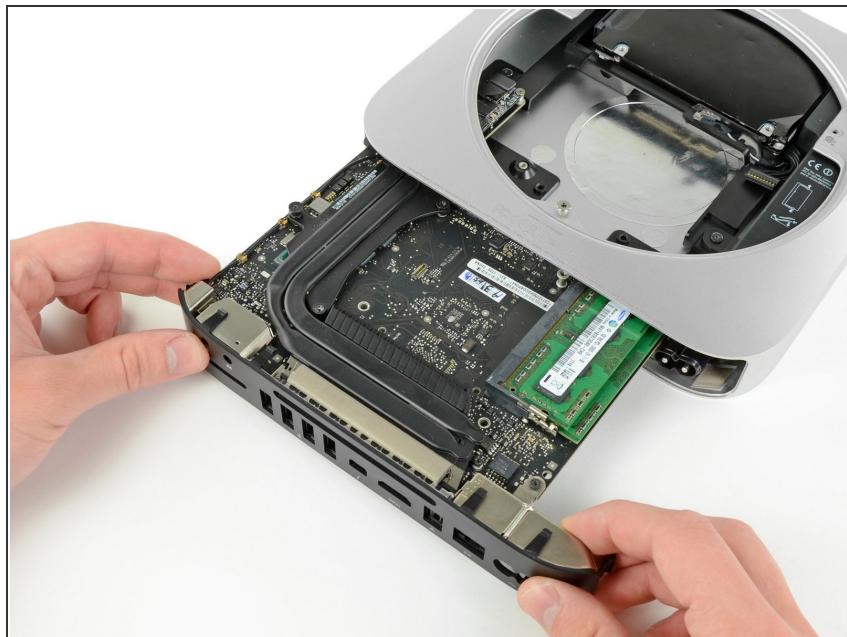
- Remove the Mac mini Logic Board Removal tool.

## Step 16



- Pull the I/O board/logic board assembly out of the outer case enough to access the power connector.
- Use your fingers to disconnect the DC-In cable from the logic board.
- Pull the power cable connector toward the front side of the mini.

## Step 17



- Carefully slide the logic board assembly out of the mini, minding any cables that may get caught.

## Step 18 — Hard Drive



- Pull the hard drive away from the front edge of the mini and remove it from the outer case.

*(i)* During reassembly, there are two pins on the inside edge of the hard drive that fit into the case. The holes have rubber grommets around them, so it may be difficult to tell when you have seated the hard drive correctly.

*(i)* There are two pairs of holes in the case. Insert the pins into the holes closest to the bottom of the case.

## Step 19 — Power Supply



- Remove the 7.9 mm T6 Torx screw securing the power supply and hard drive tray to the outer case.
- ▣ During reassembly, ensure the cables that run alongside the hard drive are tucked under the power supply. This will ensure the hard drive is properly seated. In addition, the antenna screw holes will not line up if there are cables in the way.

## Step 20



- Pull the silver metal AC-In socket retainer away from the side of the outer case and remove it from the mini.
- ▣ During reassembly, notice that the silver clip hugs either side of the lower beveled edge of the AC connector. When sliding the clip back in it will hit a stop, but not *click* into place. You will know that you did it correctly because it will not easily move out of position.

## Step 21



- Rotate the AC-In connector 90 degrees counter-clockwise.

## Step 22



- Slide the power supply out of the mini, minding any cables that may get caught.

## Step 23 — Hard Drive Tray



- Remove the 7.9 mm T6 Torx screw securing the hard drive tray to the outer case.

## Step 24



- Remove the hard drive tray from the outer case.

## Step 25 — Dual Hard Drive Kit



*(i)* The following steps will guide you through installing a second hard drive in your mini.

- In the next few steps you will be installing the grommets in the holes located along the brackets boxed in red.

## Step 26



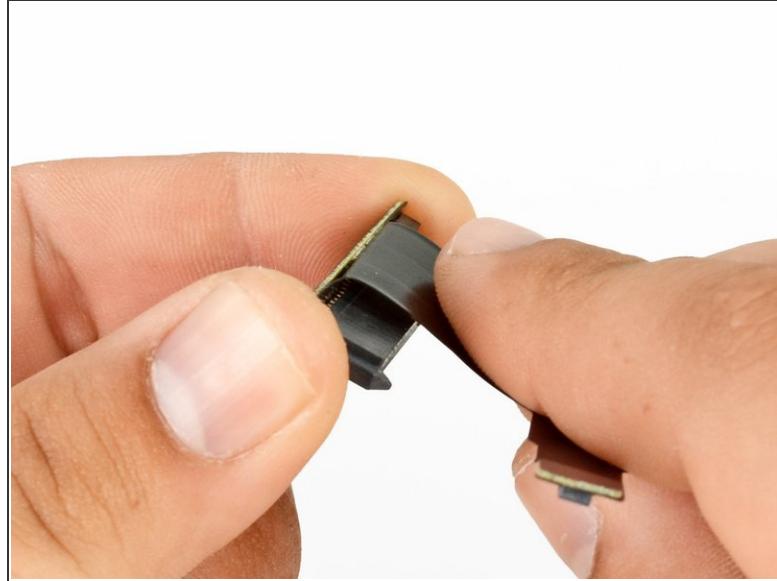
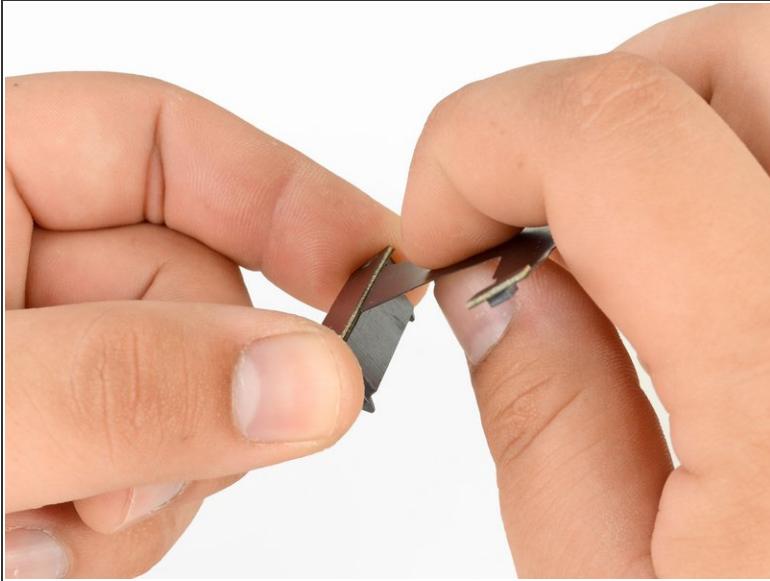
- While working from the inner side of the bracket, push the grommet through the hole in the side of the bracket.
- Be sure the grommet is seated nicely in the bracket as seen in the third picture.
- Repeat the process for the remaining three grommets on either sides of the brackets.

## Step 27



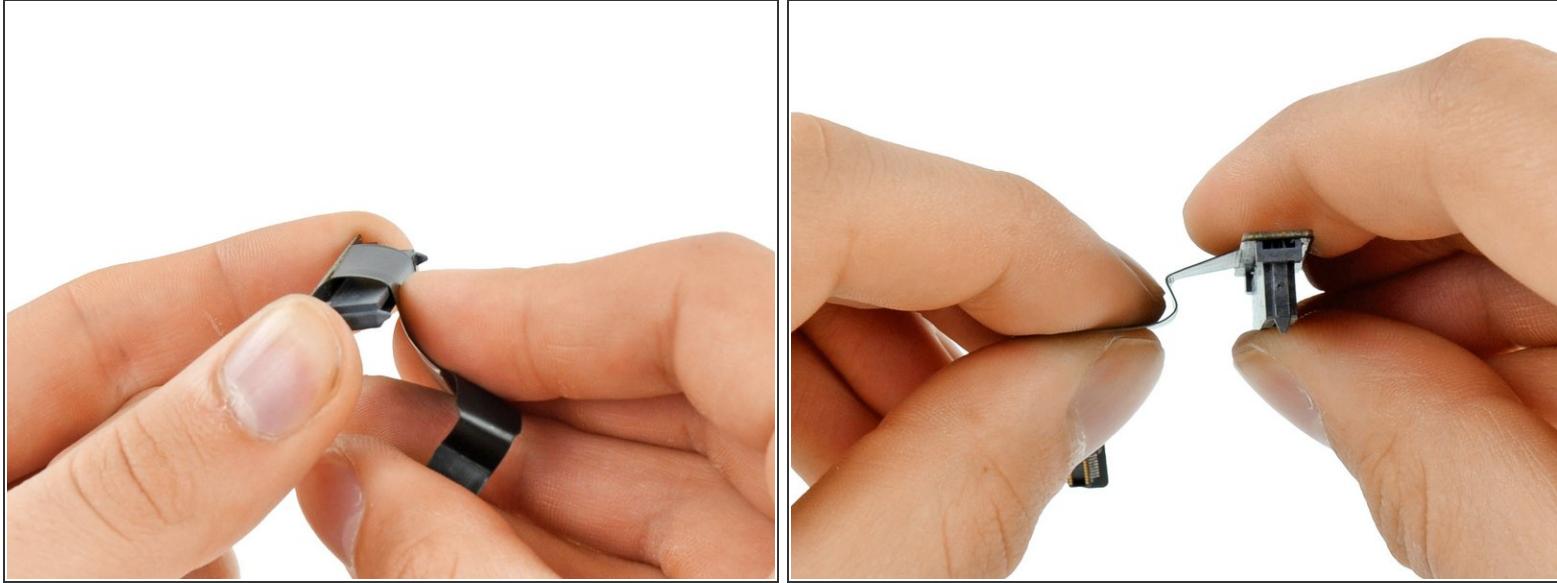
- The bracket with all four grommets installed should look like the bracket shown in this picture.

## Step 28



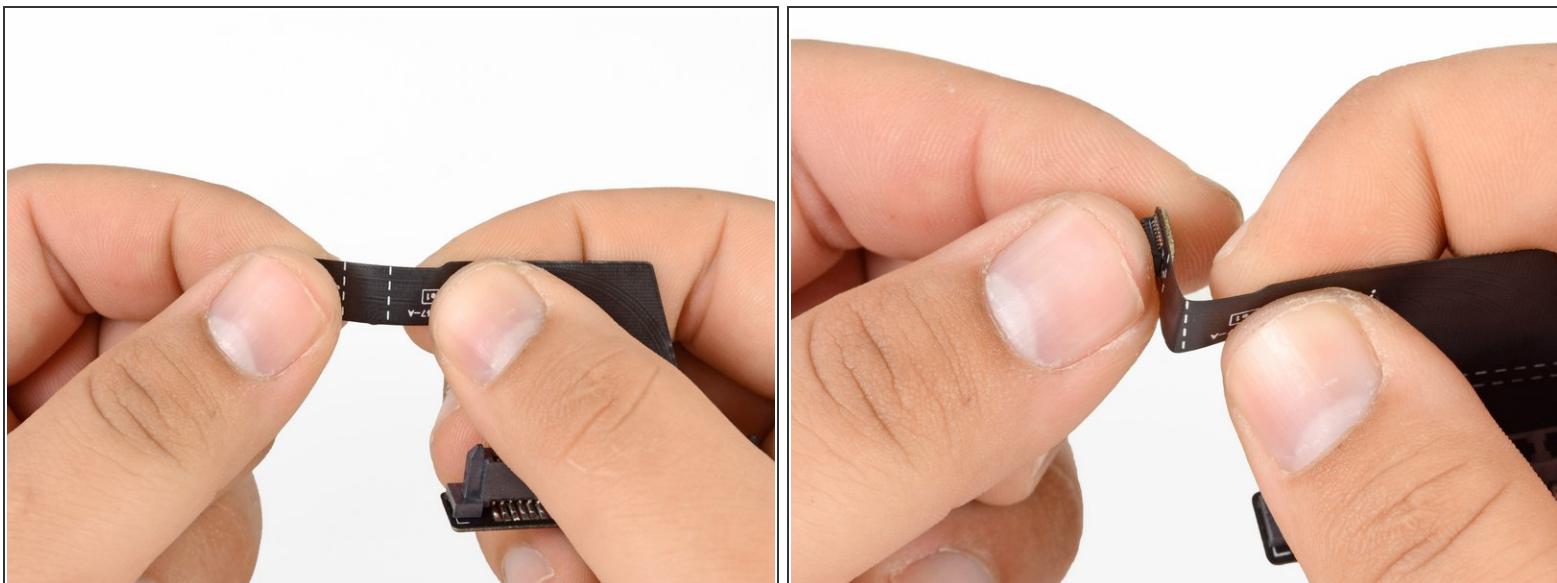
- Bend the ribbon cable along the dotted lines to help the connectors remain seated in their sockets.
- Bend the ribbon cable 90 degrees at the SSD connector so that it is parallel to the connector.

## Step 29



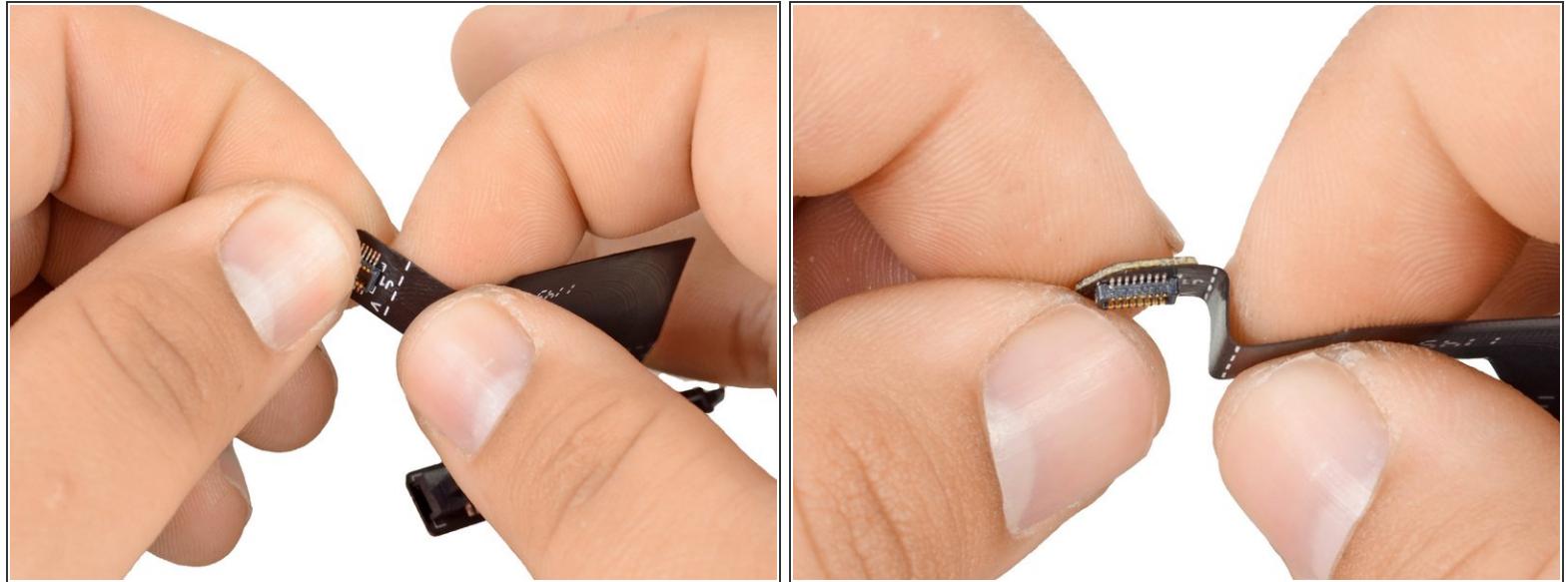
- Use the edge of the SSD connector to put a 90 degree downward bend in the cable along the first large dotted line.
- Bend the ribbon cable back up 90 degrees along the second large dotted line.

## Step 30



- Hold the ribbon cable on either side of the first small dotted line and bend it up 90 degrees.

## Step 31



- Bend the ribbon cable down 90 degrees along the second small dotted line.

## Step 32



- Attach the cable included in the kit to your second hard drive. In our case, we are using an SSD.

**i** If your cable came with a small piece of black tape with rounded corners, you can install it over the hard drive cable connector to secure the connector to its socket on the hard drive. The piece of tape is not required and not installing it will have no adverse effects on your machine's performance.

**!** Before attaching the cable to your hard drive make sure it has been properly folded along the dotted white lines. This will help the cable attach and stay in-place.

## Step 33



- Use a T6 Torx screwdriver to install two of the set screws on the side of the hard drive closest to the end of the hard drive cable that attaches to the logic board.
- Tighten the screws until they contact the end of the threaded holes in the side of the hard drive. They are shown correctly installed in the third picture.

## Step 34

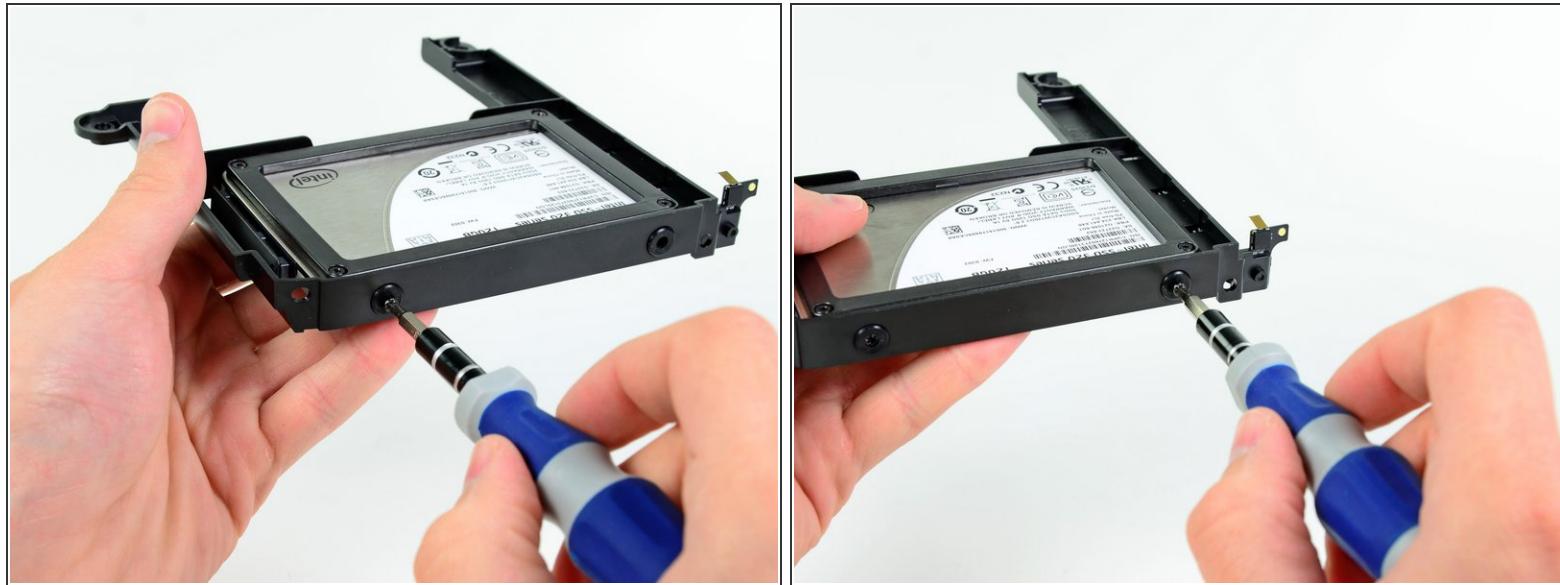


- In the next two steps, you will install the hard drive into its bracket.

**⚠** When inserting the hard drive, be sure to place it in its bracket cable side up with the SATA connector closest to the bulge in the bracket seen in the third picture.

- Push the set screws into the grommets in the bracket and install the hard drive up into its bracket as seen in the second picture.

## Step 35



- Use a T6 Torx screwdriver to install the remaining two set screws through the grommets and into the side of the hard drive.

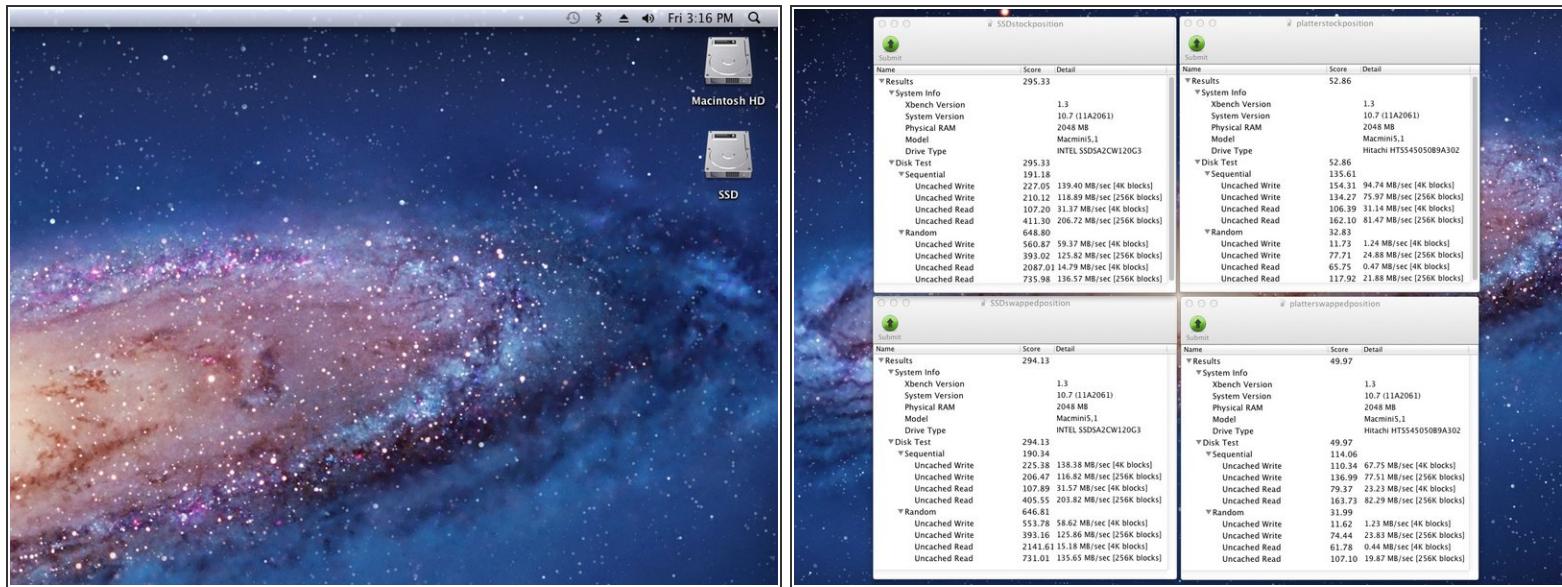
## Step 36



- Install the second hard drive assembly into the outer case.
- Be sure that the mounting holes line up with the threaded holes in the outer case as seen in the second picture.
- When the logic board is installed, simply connect the second hard drive cable to the free socket on the logic board.

*(i)* The second hard drive cable should lay flat between the two hard drives. If the second hard drive cable is placed on top of the first, the antenna plate will not reattach, and you could damage your cable.

## Step 37



- When you start up your machine, you'll see both drives are recognized by the mini.
- Xbench scores show that if you install hard drives in either the top or the bottom position, their speeds will remain the same.

*(i)* To minimize the amount of work necessary when adding an SSD to be used as your primary drive, we recommend installing the SSD like we did in this guide and leaving the stock platter drive in its original bottom position (closest to the antenna plate).

- After reassembly, boot the mini into [Lion Recovery](#) and use disk utility to erase your SSD. Then install Lion on your SSD. After rebooting, go into system preferences>startup disk and choose your SSD as the startup disk.

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