

ATA Controller Board Replacement Instructions

Follow the instructions in this sheet carefully. Failure to follow these instructions could damage your equipment and void its warranty.

Note: Online instructions covering customer-installable parts are available at <http://www.info.apple.com/installparts/>.

Tools Required

No tools are required for this procedure. You may, however, find a Phillips screwdriver useful in releasing the thumbscrews at the front of the server.

Opening the Server

The server slides open from the front of the rack. The top cover remains in place in the rack while the bottom housing (containing all internal components) should be placed on a sturdy, flat surface.

1. Alert users that the server will be unavailable for a period of time.
2. Shut down the server.

Warning: To avoid damaging internal components or causing injury, always shut down the server before opening it. After you shut down the server, internal components can be very hot. Let the server cool down before continuing.

3. Write down the server's serial number, which is located on the back panel. If it is necessary to set up the server's software after you replace the ATA controller board, you will be asked for the serial number at login.

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4. If the server is in the locked position (the yellow security LED on the front panel is on), use the Allen key that came with the server to unlock it.
 5. If the cable management arm is not in use, unplug all external cables except the power cord.
 6. Touch the server's metal case to discharge any static electricity.

Important: Always ground yourself by touching the server's case before you touch any parts or install any components inside the server. To avoid static electricity building back up in your body, do not walk around the room until you have completed your work and closed the computer.

7. Unplug the power cord.

Warning: The power supply in the server is a high-voltage component and should not be opened for any reason, even when the server is off.

8. Release the two thumbscrews at the front of the server. **(Figure 1)**

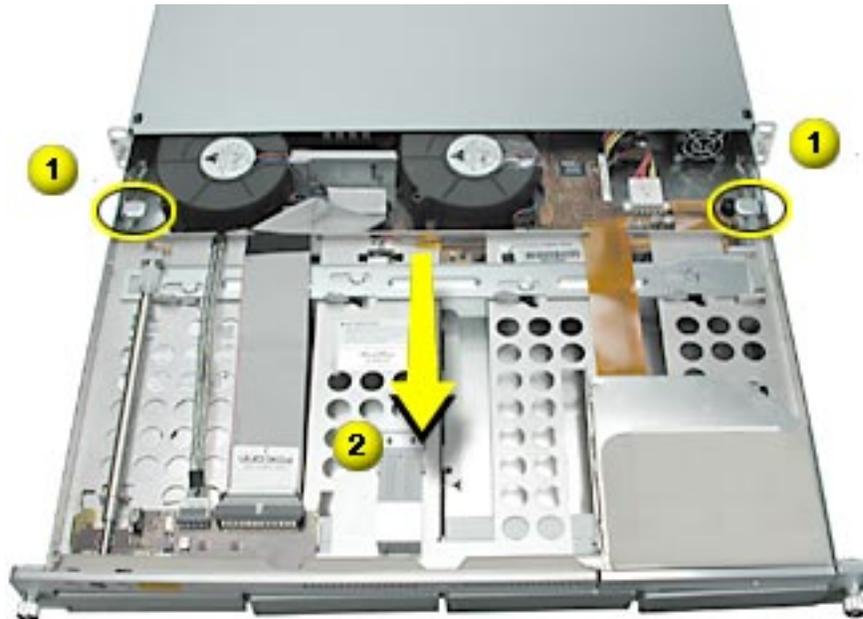
Note: The thumbscrews are captive and do not separate from the bottom housing.

Figure 1



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9. Grasp the thumbscrews and slide the bottom housing forward part way to expose the two chassis levers. **(Figure 2)**
 10. While depressing both levers, pull the bottom housing all the way forward and remove it from the rack.

Figure 2



11. Place the bottom housing on a sturdy, flat surface and ESD mat.
12. Put on the ESD wrist strap.

Removing the Installed ATA Controller Board

Note: There are two versions of Xserve. If your version does not include a plastic duct over the heatsink, skip to step 3.

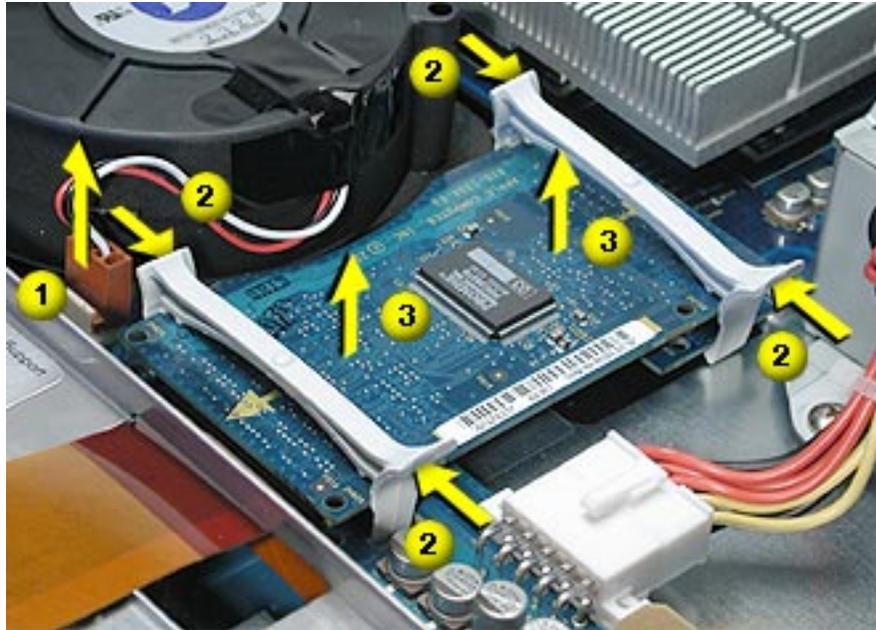
1. Release the latch on the heatsink duct from its slot, slide the cover away from the blower, and lift the end of the duct as shown. **(Figure 3)**
2. Remove the duct from the server.

Figure 3



3. If necessary, disconnect the blower cable nearest the ATA controller board. **(Figure 4)**
4. Press in on both ends of the clip securing the right side of the ATA controller board and remove the clip from the server. Repeat for the clip on the left side of the board.
5. Lift the ATA controller board straight up to disconnect it from the drive interconnect and logic boards and remove the board from the server.

Figure 4

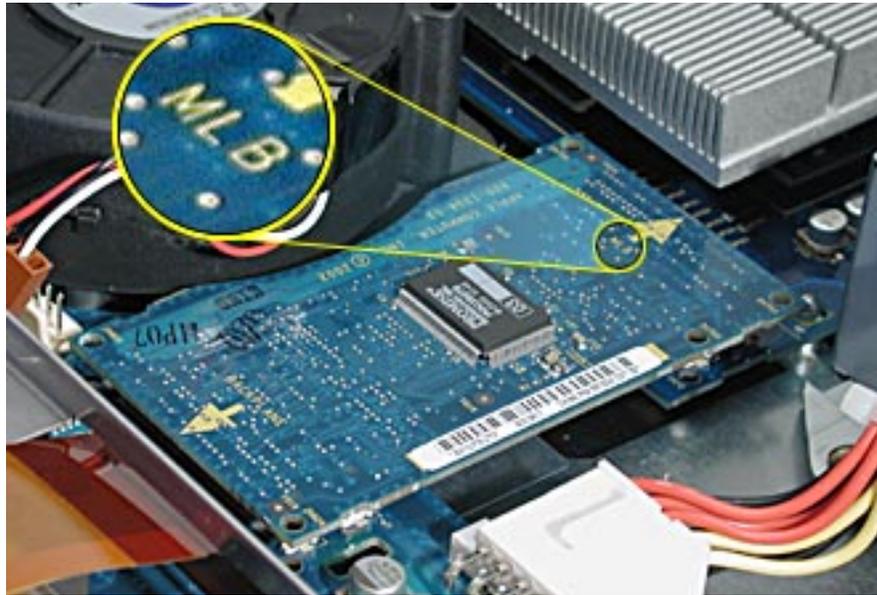


Installing the Replacement ATA Controller Board

1. Connect the replacement ATA controller board to the drive interconnect and logic boards.

Note: When replacing the ATA controller board, align it over the two pairs of connectors on the drive interconnect and logic boards, making sure the “MLB” arrow printed on it points toward the logic board, and press down. **(Figure 5)**

Figure 5



2. Reinstall the two ATA controller clips. **(Figure 6)**

Note: When replacing the ATA controller board clips, orient them so that the long end of each clip points away from the middle of the server. Place the inside edge of the clip into the small notch and then snap down the outer edge of the clip.

Figure 6



3. If you disconnected it earlier, reconnect the blower cable nearest the ATA controller board.
4. If necessary, replace the heatsink duct on the heatsink.

Closing the Server

1. Carefully slide the bottom housing back into the rack.
2. Tighten the front thumbscrews to secure it.

Warning: Never turn on the server unless all of its internal and external parts are in place and it is closed. Operating the server when it is open or missing parts can damage it or cause injury.

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