

PCI or AGP Card Replacement Instructions

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

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

Note: Xserve provides three slots for PCI expansion cards. Two slots are on a riser card located at the back left corner of the logic board; an additional slot is on a riser card at the back right corner of the logic board. A PCI card that is 7 inches long can be installed in either riser card; a PCI card that is 12 inches long can be installed only in the dual-slot riser. In addition, an AGP card can be installed in the single-slot riser.

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 a PCI or AGP card, you will be asked for the serial number at login.

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.

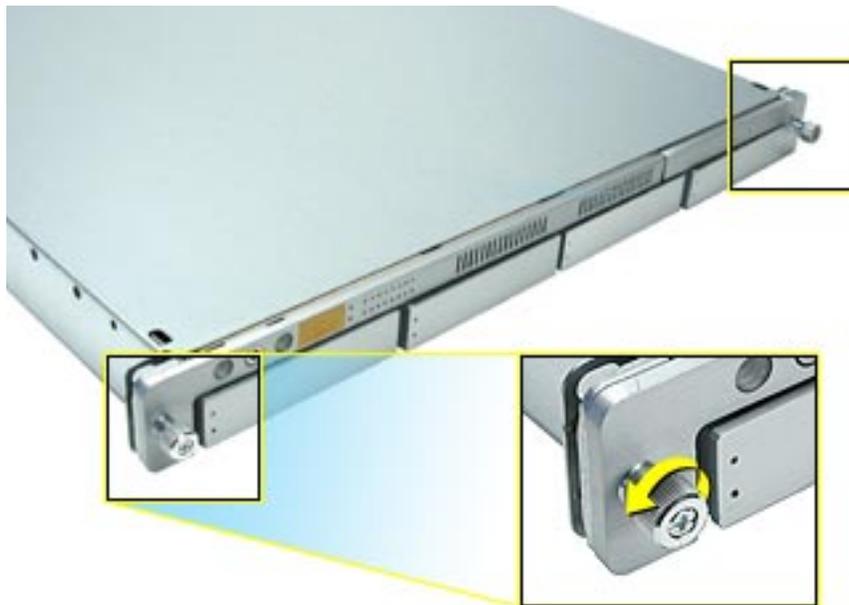
7. Unplug the power cord.

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)**

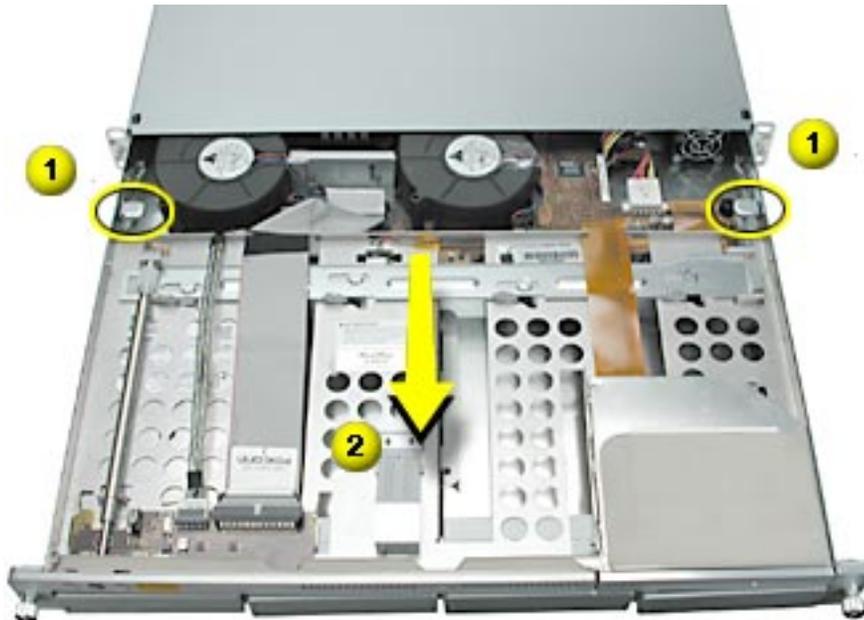
Note: The thumbscrews are captive and do not separate from the bottom housing.

Figure 1



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 a Card in the Dual-Slot Riser

1. Release the thumbscrew that secures the card fence to the back of the server.
2. Disconnect the riser from the logic board and remove the riser and card from the server. **(Figure 3)**

Figure 3



3. Disconnect the card from the riser. **(Figure 4)**

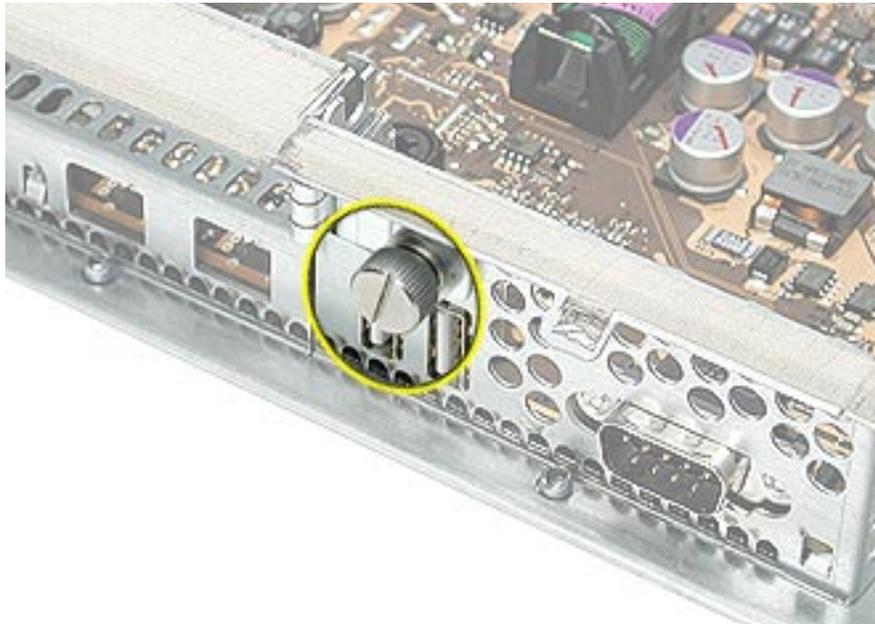
Figure 4



Removing a Card in a Single-Slot Riser

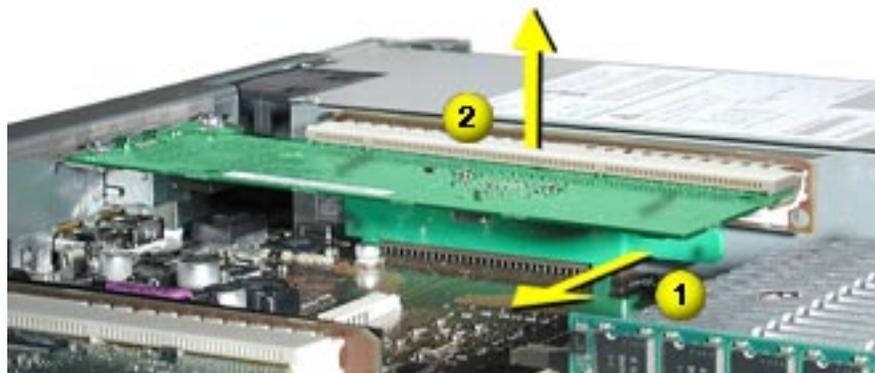
1. Release the thumbscrew that secures the card fence to the back of the server. **(Figure 5)**

Figure 5



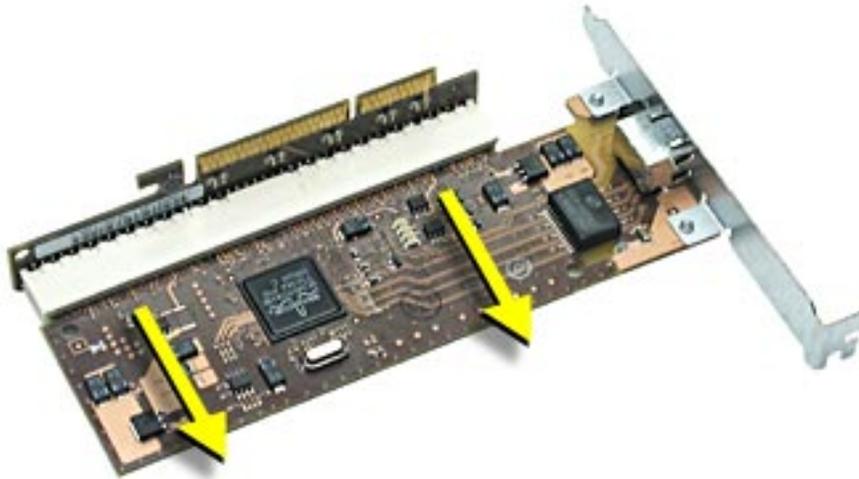
2. Pull the clip on the riser forward to release the riser from the logic board connector.
3. Disconnect the riser from the logic board and remove the riser and card from the server. **(Figure 6)**

Figure 6



4. Disconnect the card from the riser. **(Figure 7)**

Figure 7



Installing the Replacement Card

1. Install the replacement card in the riser card slot.
2. Reconnect the riser card to the logic board.
3. Tighten the thumbscrew that secures the card fence to the back of the server.

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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