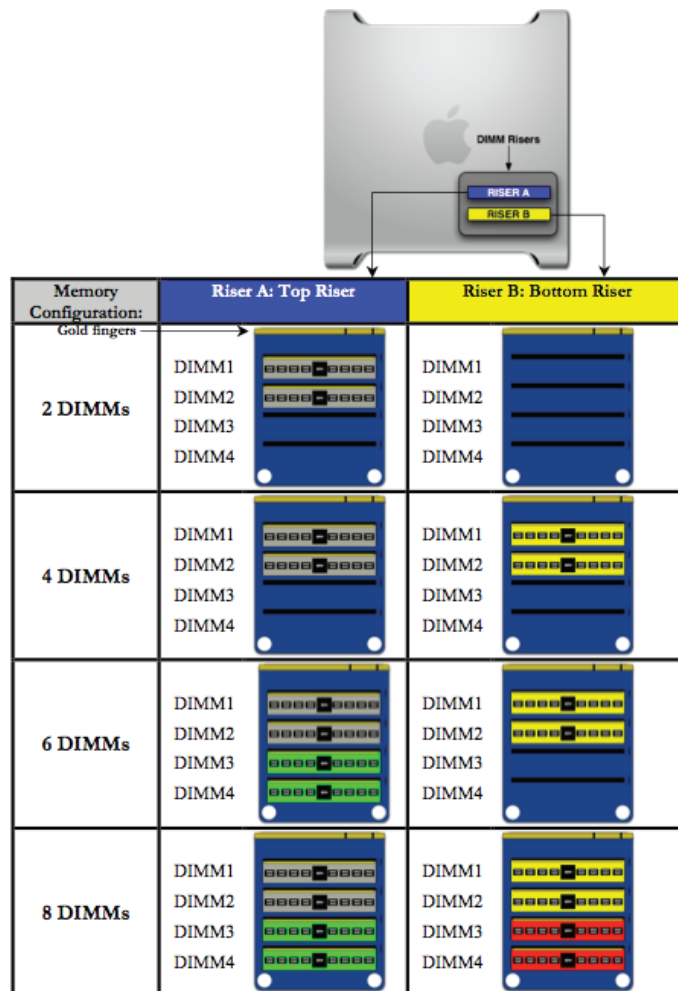


Memory (FB-DIMM) Replacement Instructions

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

Note: The Mac Pro computer has two memory riser cards with a total of 8 memory slots. On each card, the slots are arranged as two banks of two slots each. The computer comes with a minimum of 1 GB of memory, installed as a pair of 512 MB fully buffered, dual inline memory modules (FB-DIMMs) in two of the DIMM slots. Additional DIMMs can be installed in the open DIMM slots, as illustrated below.

DIMMs must be installed in pairs of equal size from the same vendor. In the illustration below, DIMMs in one colored pair do not need to match DIMMs in a different colored pair.



DIMMs for Mac Pro must fit these specifications:

- 667 MHz, FB-DIMMs
- 72-bit wide, 240-pin modules
- 36 devices maximum per DIMM
- Error-correcting code (ECC)

Memory from older Macintosh computers is not compatible with Mac Pro.

Important: For proper operation of Mac Pro computers, Apple recommends using only Apple-approved Mac Pro FB-DIMMs. Refer to GSX for Apple FB-DIMMs service part numbers.

Tools Required

No tools are required for this procedure.

Opening the Computer

1. Shut down the computer.

Warning: Always shut down the computer before opening it to avoid damaging its internal components or the components you are installing. Do not open the computer or attempt to install items inside it while it is on.

2. Wait 5 to 10 minutes to allow the computer's internal components to cool.

Warning: After you shut down the system, the internal components can be very hot. You must let the computer cool down before continuing.

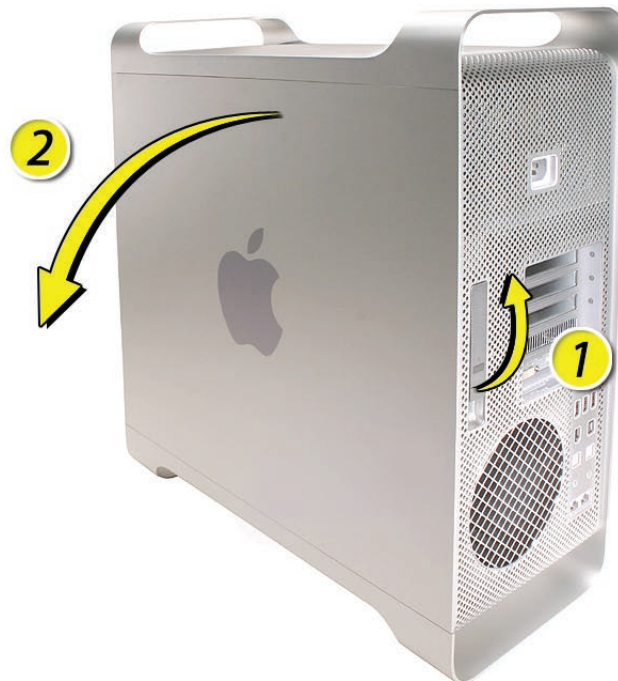
3. Unplug all external cables from the computer except the power cord.

4. Touch the metal PCI access covers on the back of the computer to discharge any static electricity from your body.

Important: Always discharge static before you touch any parts or install any components inside the computer. To avoid generating static electricity, do not walk around the room until you have finished working and closed the computer.

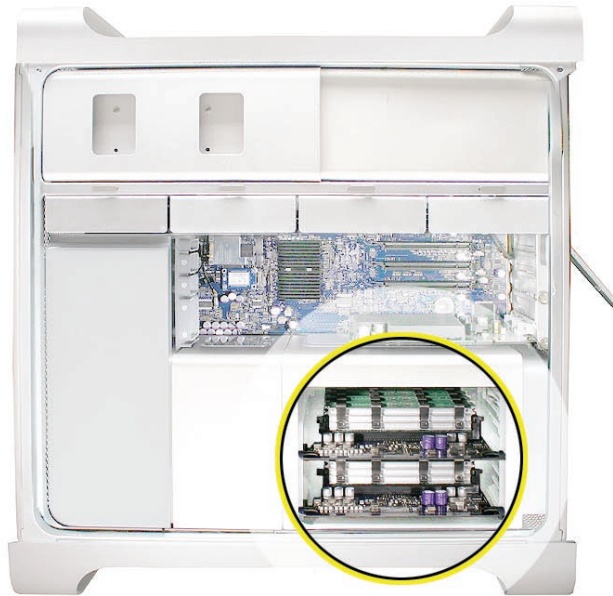


5. Unplug the power cord.
6. Hold the side access panel and lift the latch on the back of the computer.
Warning: The edges of the access panel and the enclosure can be sharp. Be very careful when handling them.
7. Remove the access panel and place it on a flat surface covered by a soft, clean cloth.

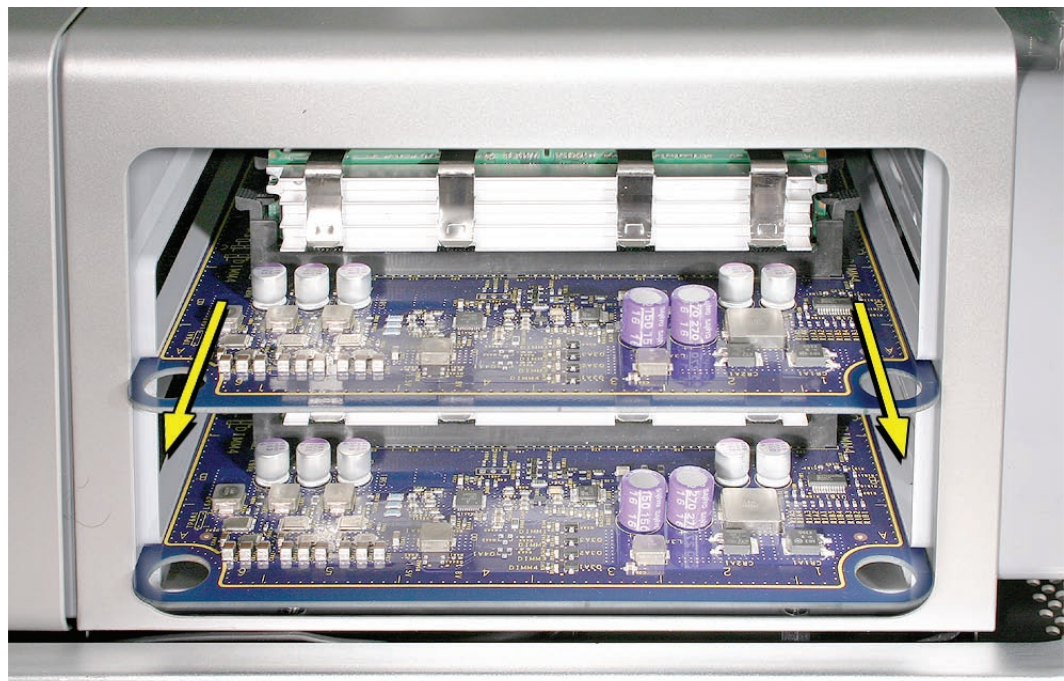


Removing the Installed FB-DIMM

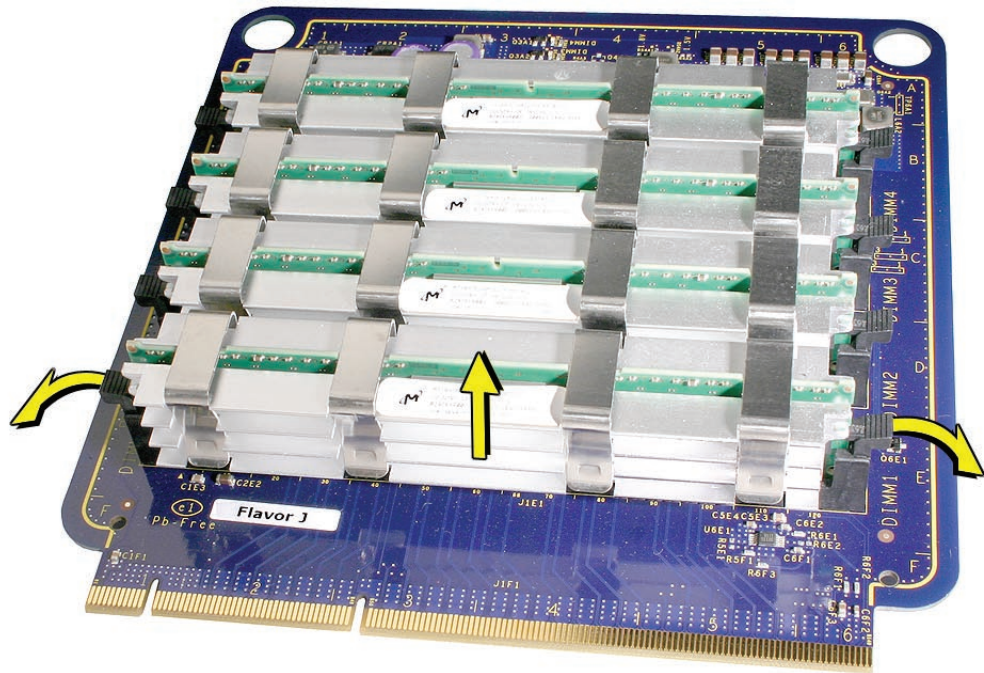
1. Carefully lay the computer on its side so that the open side faces up.
2. Locate the FB-DIMMs.



3. Holding the memory riser card by the two finger holes, pull it out of the memory cage and place the card DIMM-side-up on a soft, clean cloth.



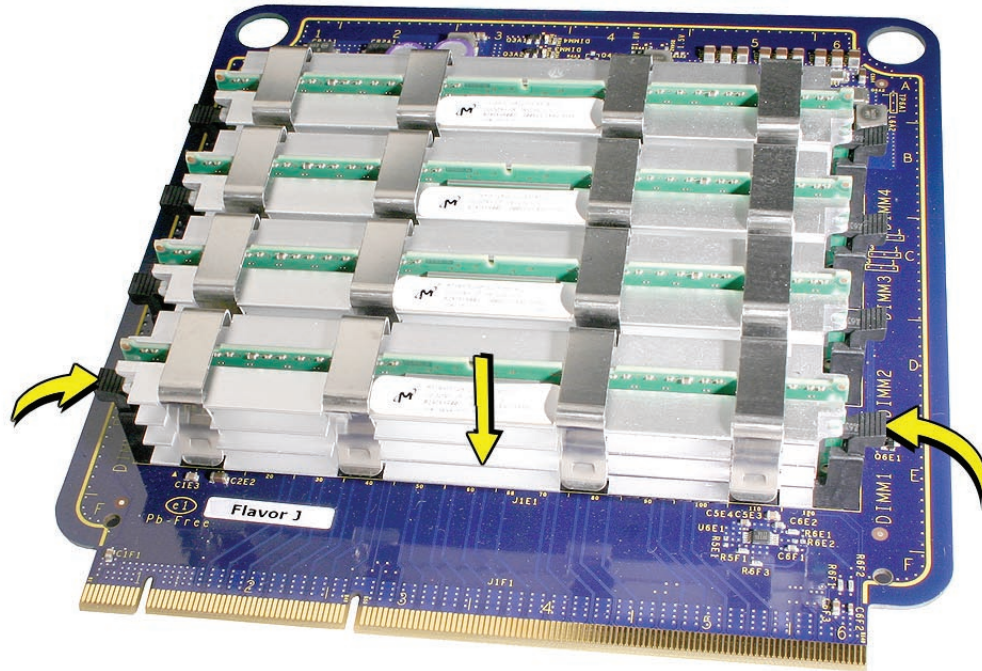
4. Open the ejectors on the DIMM slot by pushing them out to the sides, and remove the FB-DIMM from the riser card.



Warning: FB-DIMMs carry heatsinks on either side of the DIMM. Never attempt to remove the heatsinks from the DIMMs. Doing so could damage the DIMM.

Installing the Replacement FB-DIMM

1. Align the DIMM in the slot on the memory riser card and push both ends of the DIMM down until the ejectors snap back into place.



2. Insert the replacement riser card into position in the memory cage, pushing slightly until the card is seated in its logic board memory slot.

Closing the Computer

1. Replace the access panel.
Note: Make sure the latch is in the up position before replacing the access panel. If the latch is down, the access panel will not seat correctly in the enclosure.
2. Push the latch down to close and secure the access panel.
Warning: Never turn on the computer unless all of its internal and external parts are in place and it is closed. Operating the computer when it is open or missing parts can damage it or cause injury.

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