

Opening the Computer

- 1 Before you open your computer, shut it down by choosing Apple (🍏) > Shut Down.



Warning: Always shut down your Power Mac G5 before opening it to avoid damaging its internal components or the components you want to install. Do not open the computer or attempt to install items inside it while it is on.

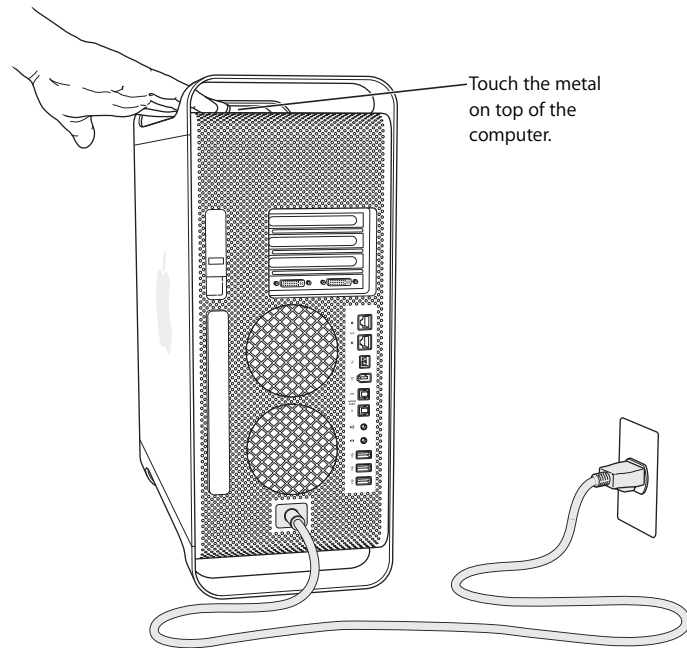
- 2 Wait 5 to 10 minutes to allow the computer's internal components to cool.



Warning: After shutting down your computer, the internal components can be very hot. Let the computer cool down before continuing.

- 3 Touch the metal on the outside of the Power Mac G5 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 finish installing the cards, memory, or internal storage device and close the computer.

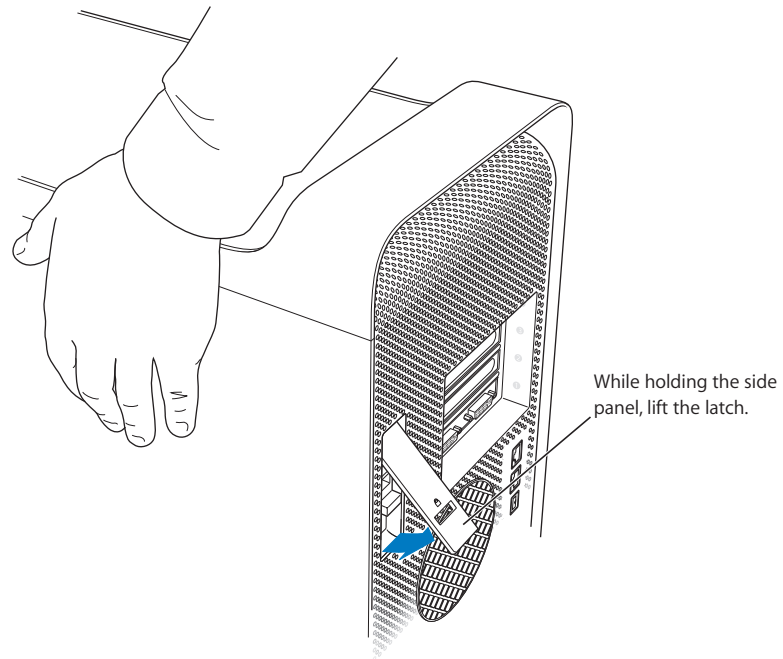


- 4 Unplug all the cables and the power cord from the computer.

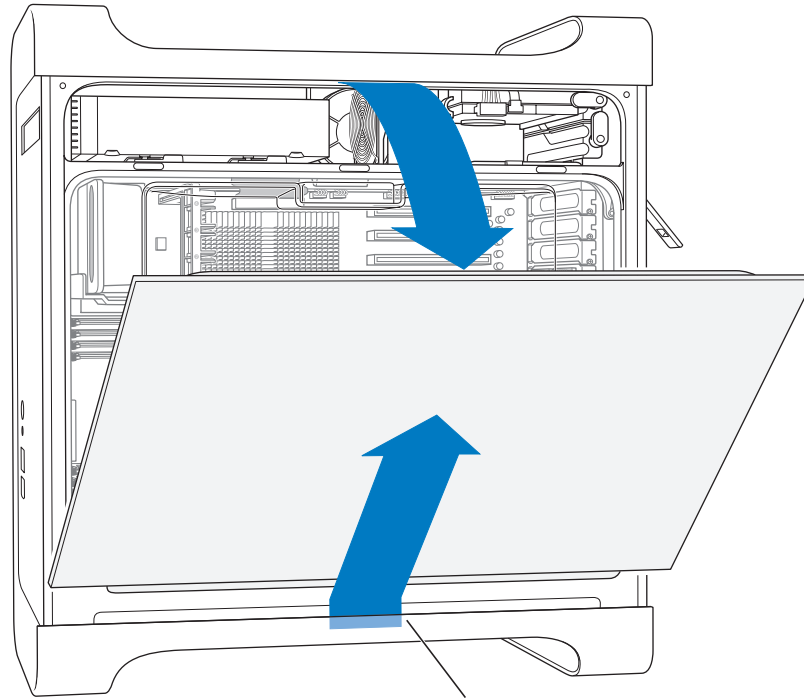


Warning: To avoid damaging its internal components or the components you want to install, always unplug your Power Mac G5. Do not attempt to install items inside the computer while it is plugged in.

- 5 Hold the side panel and lift the latch on the back of the computer.



6 Remove the side panel.

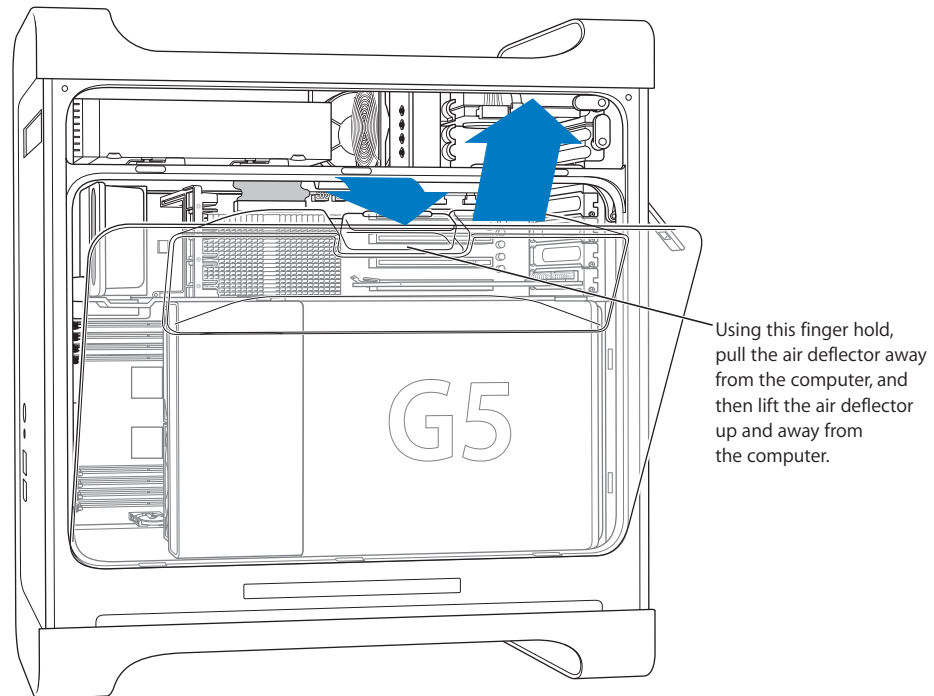


Pull the top of the side panel away from the computer, and then lift it up and remove it from the computer.

Important: When you remove the side panel, hold it securely.

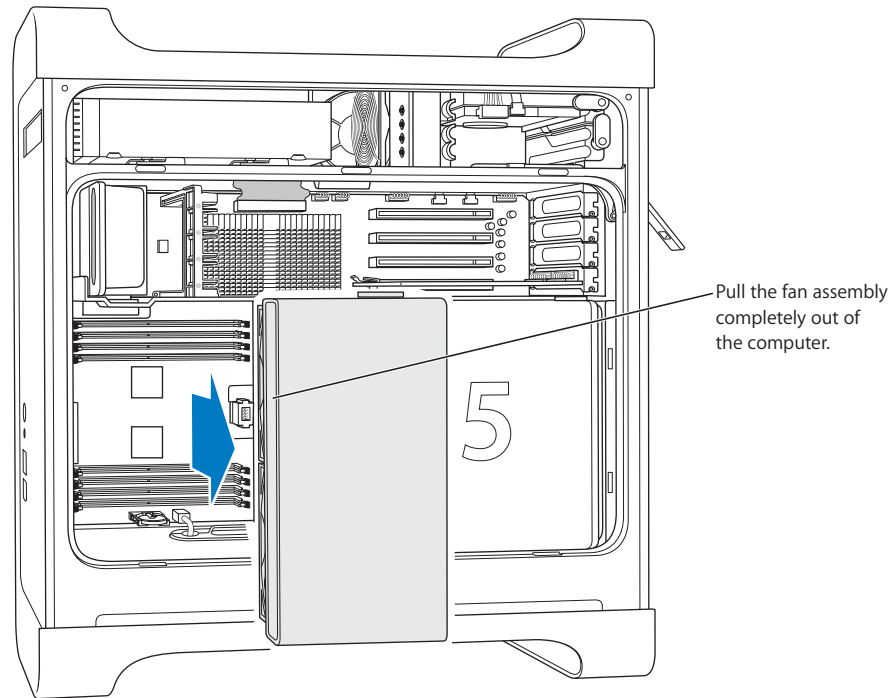
- 7 Remove the air deflector and place it on a soft, clean cloth.

Important: Always remember to replace the air deflector after you finish working inside your computer. Your computer does not function properly without the air deflector in place.



- 8 Pull the front fan assembly out of the computer, and then set it aside.

Important: When you remove the fan assembly, the metal divider panel at the top of the assembly may offer some resistance. Pulling the fan slightly away from this divider makes it easier to remove.



Note: You do not need to remove the front fan assembly to replace or install optical or hard disk drives or PCI Express cards.

Installing Memory

Your Power Mac G5 has eight memory slots (in two banks of four each). You can install additional synchronous dynamic random-access memory (SDRAM) in packages called dual inline memory modules (DIMMs) in the memory slots. Your computer comes with a minimum of 512 MB of random access memory (RAM), installed as a pair of 256 MB DIMMs in two of the DIMM slots. You can install additional pairs of DIMMs in the open DIMM slots.

DIMMs must be installed in equal-sized pairs and fit these specifications:

- PC2-4200, 533 MHz, Double-Data-Rate 2 (DDR2) DIMMs, also known as DDR2-533
- 64-bit wide, 240-pin modules
- 18 memory devices maximum per DIMM
- Conform to JEDEC specification (see note below)
- Nonparity
- Error-correcting code (ECC) or no error-correcting code (NECC) modules. Do not mix ECC and NECC memory modules within a pair.
- Unbuffered (not registered or buffered)
- Maximum height of 1.25 inches

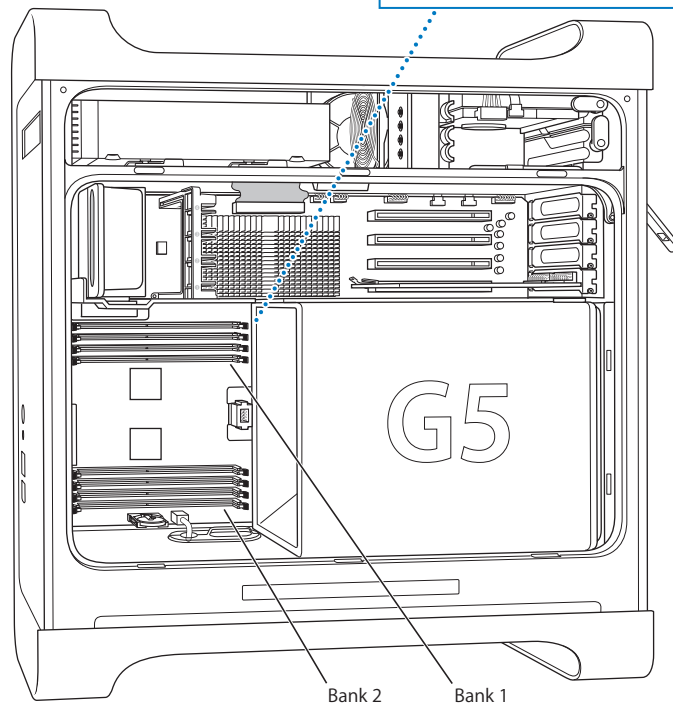
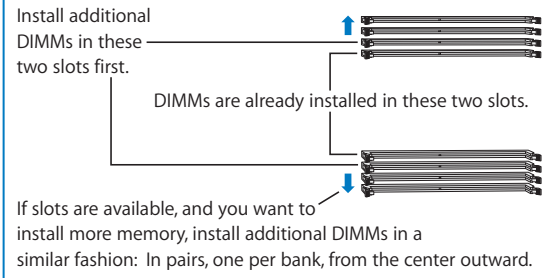
Important: DIMMs from older Macintosh computers are not compatible with and do not fit in your Power Mac G5.

Note: When purchasing DIMMs for use in Macintosh computers, make sure that the memory vendor conforms to the Joint Electron Device Engineering Council (JEDEC) specification. Check with your memory vendor to ensure that the DIMMs support the correct timing modes and that the Serial Presence Detect (SPD) feature has been programmed properly, as described in the JEDEC specification. To check the compatibility of your DIMMs, see the Macintosh Products Guide on Apple's website at www.apple.com/guide. You can purchase Apple-branded memory online from the Apple Store at www.apple.com/store.

To install memory:

- 1 Open your computer and remove the side panel, air deflector, and fan assembly following the directions that begin on page 46.

The SDRAM DIMMs must be installed in pairs with one DIMM per bank.



- 2 Locate the DIMM slots in the computer.

Important: Always install DIMMs in pairs of equal size and specification, and in the order described in the illustration above.

- 3 Open the ejectors on the DIMM slots by pushing them out to the sides.

Important: Do not touch the DIMM connectors. Handle the DIMM only by the edges.

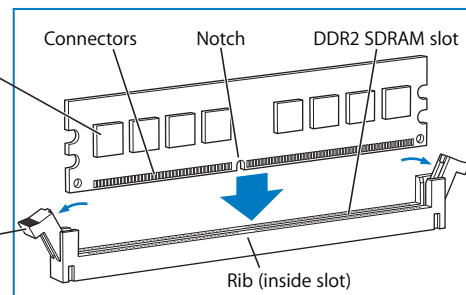
- 4 Placing one hand on the back of the computer for support, align the first DIMM in the slot and push both ends of the DIMM down until the tabs are vertical and the ejectors snap into place.

Note: If it is easier, you can lay your Power Mac G5 down to install memory. Place a soft, clean cloth on the desk or work surface to avoid scratching the work surface or your Power Mac G5.

- 5 Align the second DIMM in the opposite slot and push until the ejectors snap into place.

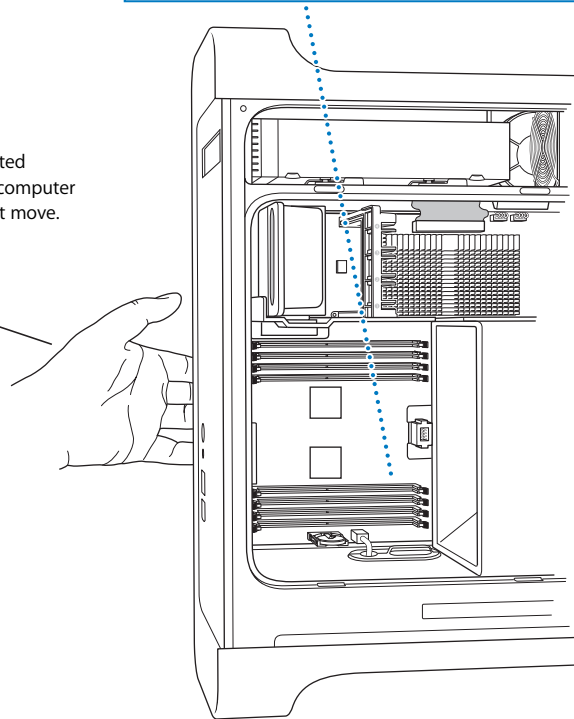
DDR2 SDRAM DIMM
(Your DIMM's shape and components may vary.)

The DDR2 SDRAM DIMM fits into the slot only one way. Align the notch in the DIMM with the small rib inside the slot. With the ejectors open (as shown), push the DIMM until it snaps into place. The ejectors close automatically.



Ejectors
(They should be pushed outward to be in the open position, as shown.)

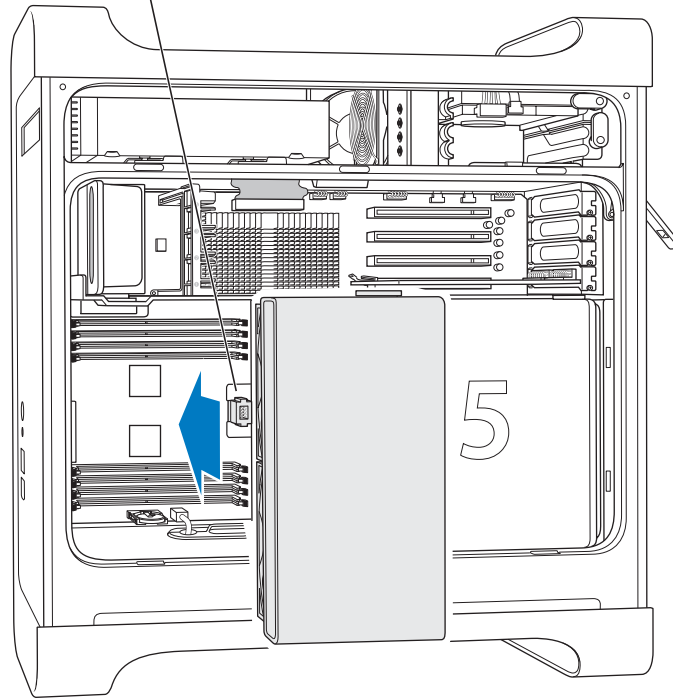
To make sure the DIMMs are properly seated in their slots, place one hand behind the computer and hold the computer so that it does not move. With your other hand, press each DIMM firmly into its slot.



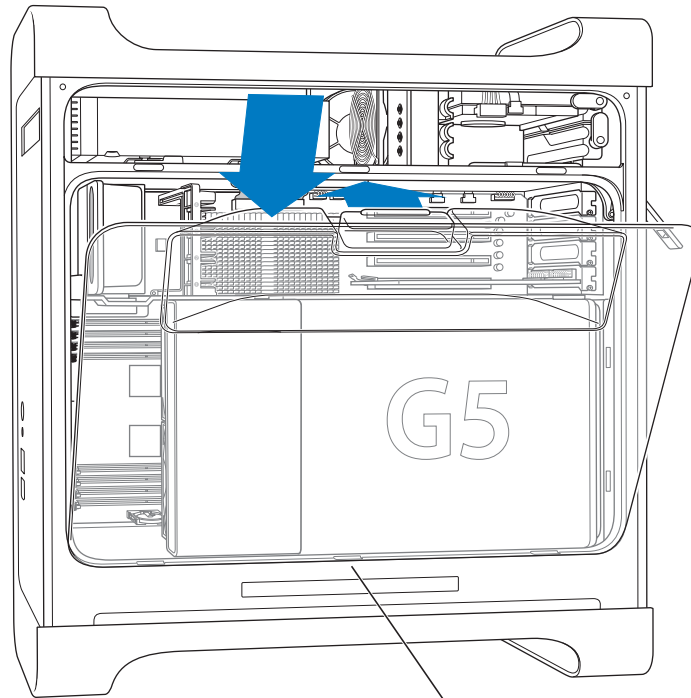
- 6 Replace the front fan assembly by firmly pushing it back into the computer by the handle until it connects.

Important: Make sure the fan assembly slides into the sheet metal divider at the top and engages the connector, as shown in the illustration, or your computer will not operate properly. Gently pull the fan assembly to see if it is properly connected. If it resists and stays in place, it is connected.

Slide the plastic rail on the fan assembly into the cutout in the sheet metal divider inside the computer. The fan assembly needs to engage this connector.



7 Replace the air deflector.

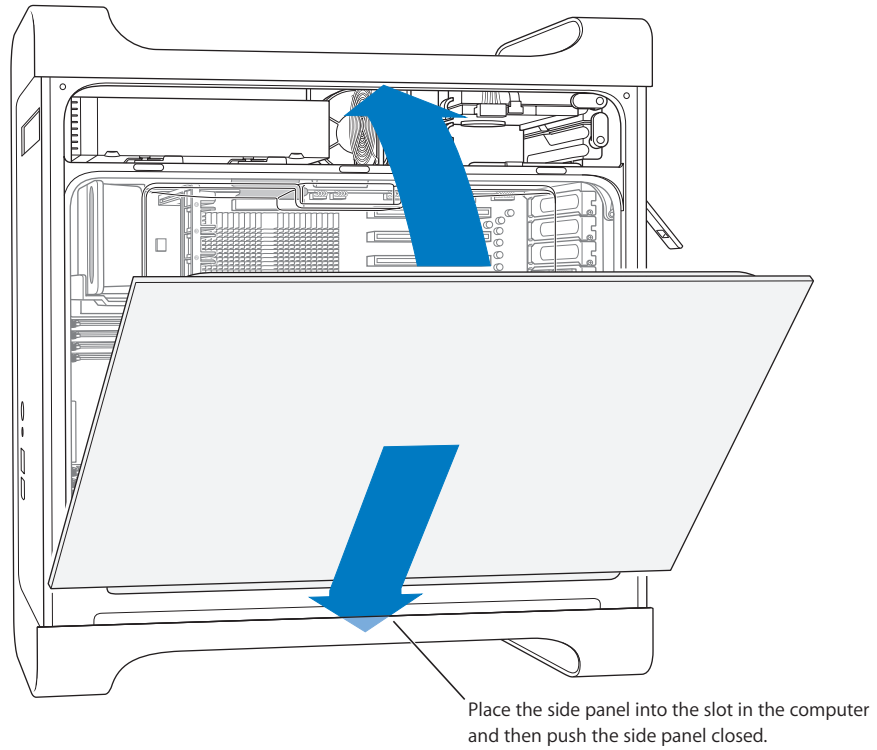


Slide the three tabs on the air deflector into the slots in the computer and then push the air deflector closed.

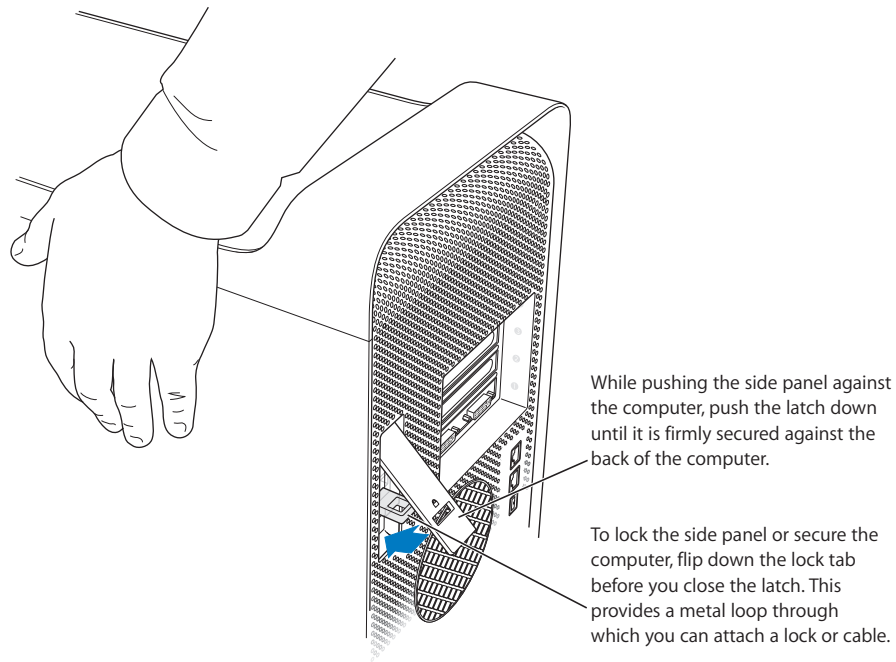
Important: Always remember to replace the air deflector. Your computer does not function properly when the air deflector is not in place.

8 Replace the side panel.

Important: Always replace the side panel before you start up your computer. Your computer does not function properly when the side panel is not in place.



- 9 Push the latch down to close and secure the side panel.



Important: When you replace the side panel, hold it securely so that it stays in place as you push the latch down.

Installing Internal Storage Devices

Your Macintosh has three internal drive bays: one optical drive bay and two hard drive bays. In most configurations, a single hard disk drive occupies the top hard drive bay and an optical drive is located in the front optical drive bay.

You can add a Serial ATA hard disk drive to the empty slot in the hard drive bay. The drives must meet these specifications:

- *Type:* Serial ATA
- *Width:* 3.9 inches (102 mm)
- *Depth:* 5.7 inches (147 mm)
- *Height:* 1.0 inch

For more information about requirements and devices supported, visit an Apple Authorized Reseller or the Service & Support website at www.apple.com/support.

Important: Use the original Apple cables that came with your Power Mac G5 when you install or replace optical drives or Serial ATA hard disk drives.