



## Power Macintosh 7300, 7500, and 7600 Series

---

Power Macintosh 7300/166 (Europe and Japan only),  
7300/180, 7300/200, 7500/100, 7600/120,  
7600/132, and 7600/200 (Japan only)



# Basic Navigation Within Service Source

## Plug-Ins :



Find

Searches the current document only



Search

Searches across all Acrobat documents



Service Source Main Menu



Service Source Help

- Product Name
- Basics
- Specifications
- Troubleshooting
- Take Apart
- Parts
- Exploded View

When viewing Service Source Acrobat procedures with bookmarks active (the default setting), you can click a chapter title to go directly to that chapter. You can also click the triangle to reveal and directly access topics within the chapters.

When printing pages from Acrobat, use these numbers to specify the page range you wish to print. The page numbers at the top of procedure pages are relative to each chapter, not to the whole document.

Go to Next page

Go to Previous page

Indicates the end of a topic

Indicates a topic that is two or more pages





## Basics

---

Power Macintosh 7300, 7500, and  
7600 Series





## Overview

The Power Macintosh 7300, 7500, and 7600 share the same housing and feature a chassis design that allows you to access the logic board and its components (including the plug-in microprocessor card) without having to remove the power supply or any drives. This flexible design makes the Power Macintosh 7300, 7500, and 7600 easier to service and upgrade.

Features of the Power Macintosh 7300 include

- A 166, 180, or 200 MHz PowerPC™ 604e microprocessor card with built-in FPU and 256K cache
- 16 or 32 MB of DRAM, expandable to 512 MB using 168-pin, 60 ns, 64-bit DIMMs
- 2 MB VRAM, expandable to 4 MB
- 2 GB hard drive





- Two SCSI DMA buses supporting up to eight SCSI devices and transfers up to 10 MB/s (internal bus only)
- Three PCI expansion slots
- Built-in AAUI and 10BASE-T Ethernet
- Two GeoPort serial ports
- CD-ROM drive at 12x-speed
- CD-quality stereo sound in/out
- Mac™ OS system software 7.5.5

Features of the Power Macintosh 7500 include

- A 100 MHz PowerPC 601 microprocessor card with built-in FPU and optional Level 2 cache
- 8 or 16 MB DRAM expansion up to 512 MB using 168-pin, 70 ns, 64-bit DIMMs
- 2 MB VRAM, expandable to 4 MB
- 500 MB or 1 GB hard drive
- Two SCSI DMA buses supporting up to eight SCSI devices and transfers up to 10 MB/s (internal bus only)





- Three PCI expansion slots
- One Digital Audio Video (DAV) slot
- Video-in support via external ports
- Built-in AAUI and 10BASE-T Ethernet
- Two GeoPort serial ports
- CD-ROM drive at 4x-speed
- CD-quality stereo sound in/out
- Mac OS system software 7.5.2

Features of the Power Macintosh 7600 (U.S.) include

- A 120 or 132 MHz PowerPC 604 microprocessor card with built-in FPU and 256K cache
- 16 MB of DRAM, expandable to 512 MB using 168-pin, 70 ns, 64-bit DIMMs
- 2 MB VRAM, expandable to 4 MB
- 1.2 GB hard drive
- Two SCSI DMA buses supporting up to eight SCSI devices and transfers up to 10 MB/s (internal bus only)





- Three PCI expansion slots
- One Digital Audio Video (DAV) slot
- Video-in support via external ports
- Built-in AAUI and 10BASE-T Ethernet
- Two GeoPort serial ports
- CD-ROM drive at 4x- or 8x-speed
- CD-quality stereo sound in/out
- Mac OS system software 7.5.3

Features of the Power Macintosh 7600/200 (Japan only) include

- A 200 MHz PowerPC 604e microprocessor card with built-in FPU and 256K cache
- 32 MB of DRAM, expandable to 512 MB using 168-pin, 60 ns, 64-bit DIMMs
- 2 MB VRAM, expandable to 4 MB
- 2 GB hard drive
- Two SCSI DMA buses supporting up to eight SCSI devices





- and transfers up to 10 MB/s (internal bus only)
- Three PCI expansion slots
  - One Digital Audio Video (DAV) slot
  - Video-in support via external ports
  - Built-in AAUI and 10BASE-T Ethernet
  - Two GeoPort serial ports
  - CD-ROM drive at 12x-speed
  - CD-quality stereo sound in/out
  - Support for TCP/IP networking software with Apple Open Transport
  - Mac OS system software 7.5.5

The Power Macintosh 7300, 7500, and 7600 Series computer is pictured on the following page.







**Figure: Power Macintosh 7300, 7500, and 7600 Computer**





## Configurations

The Power Macintosh 7300/166 comes standard with

- 166 MHz PowerPC 604e microprocessor card
- 16 MB DRAM
- 2 GB hard drive
- AppleCD 1800i 12x CD-ROM drive
- 2 MB of VRAM
- 256K Level 2 cache

The Power Macintosh 7300/180 comes standard with

- 180 MHz PowerPC 604e microprocessor card
- 16 MB DRAM
- 2 GB hard drive
- AppleCD 1800i 12x CD-ROM drive
- 2 MB of VRAM
- 256K Level 2 cache





The Power Macintosh 7300/200 comes standard with

- 200 MHz PowerPC 604e microprocessor card
- 32 MB DRAM
- 2 GB hard drive
- AppleCD 1800i 12x CD-ROM drive
- 2 MB of VRAM
- 256K Level 2 cache

The Power Macintosh 7500/100 comes standard with

- 100 MHz PowerPC 601 microprocessor card
- 8/16 MB DRAM
- 500 MB or 1 GB hard drive
- AppleCD 600i 4x CD-ROM drive
- 2 MB of VRAM

The Power Macintosh 7600/120 comes standard with

- 120 MHz PowerPC 604 microprocessor card
- 16 MB DRAM





- 1.2 GB hard drive
- AppleCD 600i 4x CD-ROM drive
- 2 MB of VRAM

The Power Macintosh 7600/132 comes standard with

- 132 MHz PowerPC 604 microprocessor card
- 16 MB DRAM
- 1.2 GB hard drive
- AppleCD 1200i 8x CD-ROM drive
- 2 MB of VRAM

The Power Macintosh 7600/200 comes standard with

- 200 MHz PowerPC 604e microprocessor card
- 32 MB DRAM
- 2 GB hard drive
- AppleCD 1800i 12x CD-ROM drive
- 2 MB of VRAM
- 256K Level 2 cache





## PowerPC 601 Microprocessor

The Power Macintosh 7500/100 features the PowerPC 601 RISC microprocessor. The PowerPC 601 microprocessor is installed via a card that plugs into the Macintosh 7500/100 logic board, allowing for maximum flexibility with future upgrades.

Features of the microprocessor include

- Full RISC processor architecture
- 32-bit addressing
- 64-bit data bus
- Built-in FPU
- 32K cache for data and instructions
- Internal Memory Management Unit (MMU)
- Advanced branching techniques for improved throughput





## PowerPC 604 and 604e Microprocessor

The Power Macintosh 7300 and 7600 computers feature the PowerPC 604 and 604e RISC microprocessor. The microprocessor is installed via a card that plugs into the logic board, allowing for maximum flexibility with future upgrades.

Features of the microprocessor include

- Full RISC processing architecture
- Parallel processing units: one load-store unit, two integer units, one complex integer unit, and one floating point unit
- Separate built-in caches for data and instructions, 16K each for the 604 and 32K each for the 604e
- Advanced branching techniques for improved throughput
- Bus multiplier up to 3:1 for the 604 and up to 5:1 for the 604e





## Peripheral Component Interconnect (PCI)

The Power Macintosh 7300, 7500, and 7600 computers offer a Peripheral Component Interconnect (PCI) expansion bus. Because the PCI bus is an industry standard, most existing PCI 2.0-compliant cards (with the addition of a Mac OS-specific software driver) will work in these computers.

PCI offers significantly higher performance than the NuBus architecture used in previous Macintosh models. Running at 33 MHz, the PCI bus is up to three times faster than NuBus, offering overall enhanced system performance, particularly in the areas of video and networking.





## Dual In-Line Memory Modules (DIMMs)

The Power Macintosh 7300, 7500, and 7600 computers use DRAM Dual In-Line Memory Modules (DIMMs) instead of DRAM SIMMs. Whereas SIMMs have 72 pins, DIMMs have 168 pins. The extra pins provide a 64-bit data path, compared to a 32-bit data path for SIMMs. In addition, DIMMs do not have to be installed in pairs like the SIMMs on earlier Macintosh models. (However, to take advantage of memory interleaving, the DIMMs should be installed in paired slots. See “Memory Configurations” in Basics for more information.)

**Important:** The Power Macintosh 7300, 7500, and 7600 computers use +5 V DIMMs only. Single In-Line Memory Modules (SIMMs) used in previous Macintosh models are NOT compatible with these computers.







**Important:** These computers also use VRAM DIMMs (112-pin 70 ns or faster) instead of VRAM SIMMs. The VRAM SIMMs used in earlier Power Macintosh models are not compatible.

**Note:** While the Power Macintosh 7300 Series and the Power Macintosh 7600/200 ship with EDO DIMMs, the computers' memory controller treats EDO DIMMs like fast-paged DIMMs. You can therefore use either EDO or fast-paged DIMMs in these computers.





## Memory Configurations

The Power Macintosh 7300, 7500, and 7600 logic boards have eight DRAM DIMM slots, each with a 64-bit data bus. You can increase the computers' DRAM to a total of 512 MB using 5-volt, 64-bit-wide, 168-pin fast-paged mode, 70 ns DIMMs.

**Note:** These computers do not have any main memory soldered to the logic board. At least one RAM DIMM must be present for the computers to operate.

DRAM DIMMs can be installed individually; however, if you wish to take advantage of the computer's interleaving capability, which provides maximum performance, you must install the DIMMs in matching pairs and in paired slots.





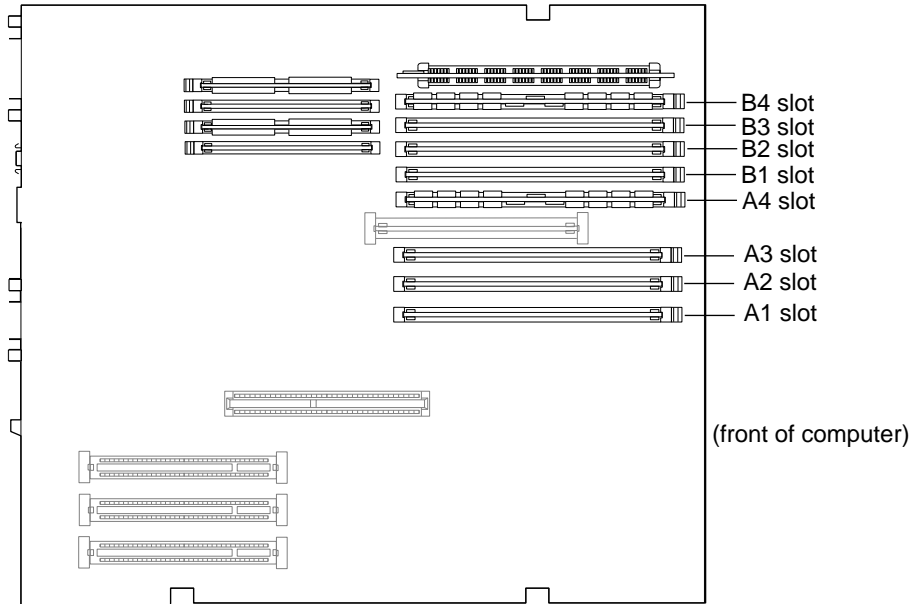
**Note:** Memory interleaving allows the computer to read or write to its memory while other memory reads or writes are occurring, thus providing for faster performance.

For a pair of DIMMs to function as a single 128-bit wide pair, they must be the same type and size.

**Note:** DIMMs purchased from different manufacturers can be paired as long as they are the same size and speed.

The drawing on the following page illustrates where the DRAM slots are located on the Power Macintosh 7300, 7500, and 7600 logic boards and how they are numbered.





**Figure: DRAM Slots on Power Macintosh 7300, 7500, and 7600**





## Ethernet Support

There are two Ethernet ports on the Power Macintosh 7300, 7500, and 7600 logic boards: an AAUI port and a 10BASE-T port. You can use only one Ethernet port at one time, however. If you have cables plugged into both Ethernet ports, the computer uses the 10BASE-T port by default.





## AV Support

The Power Macintosh 7500 and 7600 computers come standard with an AV module that provides support for: composite video and S-video input, audio input (left and right), and audio output (left and right). The Power Macintosh 7300 computers do not include an AV module.

## PC Compatibility Cards

Apple computer offers two PC Compatibility Card upgrade kits that bring full DOS functionality to the Macintosh computer. Two versions of the PC Compatibility card are available: a 7" card and a 12" card. The cards plug into any available PCI slot on the logic board. Refer to the Upgrades chapter in this manual for installation instructions.





## GeoPort

Geoport is a hardware and software communications architecture that has been optimized for computer-telephony integration. It has three main attributes:

- It lets any computer connect to any telephone (analog or digital, public or private) anywhere in the world.
- Once connected, it supports an arbitrary number of independent data streams up to a total bandwidth of 2 MB/second.
- Unlike traditional asynchronous data communications (such as AppleTalk), GeoPort also supports isochronous data streams (such as real-time voice and video) and provides the real-time Application Program Interfaces (APIs) necessary to hide the implementation details from both the recipient and the sender.





By attaching an Apple GeoPort Telecom Adapter to the Power Macintosh 7300, 7500, or 7600, you can enjoy all the features of a 33.6 modem, including data, fax, send and receive, and voice capabilities. The GeoPort Telecom Adapter serves as a line interface to standard (analog) telephone lines. The adapter is capable of sending or receiving data at up to 33.6 kbps and faxes at up to 14.4 kbps using the GeoPort Telecom Adapter software.







## The Cuda Chip

The Cuda is a microcontroller chip. Its function is to

- Turn system power on and off
- Manage system resets from various commands
- Maintain parameter RAM (PRAM)
- Manage the Apple Desktop Bus (ADB)
- Manage the real-time clock

Many system problems can be resolved by resetting the Cuda chip (see Symptom Charts for examples). Press the Cuda reset button on the logic board to reset the Cuda chip. (See "Logic Board Diagram" later in this chapter to locate the Cuda reset button.) If you continue to experience system problems, refer to "Resetting the Logic Board" later in this Basics chapter.





## Resetting the Logic Board

Resetting the logic board can resolve many system problems (refer to "Symptom Charts" for examples). Whenever you have a unit that fails to power up, you should follow this procedure before replacing any modules.

- 1 Unplug the computer.
- 2 Remove the battery from the logic board. (See Take Apart for instructions on how to remove the battery.)
- 3 Disconnect the power supply cable from the logic board and then press the Power On button. (See "Logic Board Diagram" later in this chapter to locate the Power On button.)
- 4 Wait at least 10 minutes before replacing the battery.





- 5 Make sure the battery is installed in the correct +/- direction.
- 6 Reassemble the computer and test the unit.

**Note:** This procedure resets the computer's PRAM. Be sure to check the computer's time/date and other system parameter settings afterwards.

**Note:** If this procedure resolves the problem, claim an adjustment on an SRO. If not, replace the defective component and DO NOT claim the adjustment procedure.





## Fast SCSI

The Power Macintosh 7300, 7500, and 7600 computers offer Fast SCSI support on the internal SCSI connector, which provides for significantly enhanced data throughput. The internal SCSI bus on these computers supports transfer rates up to 10 MB/sec.

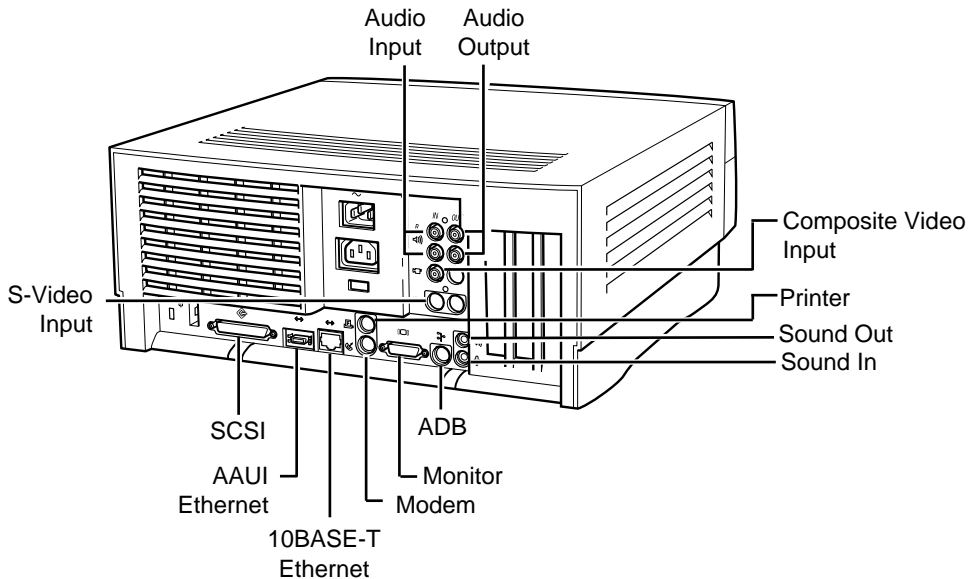




## Rear View Diagram

The drawing on the next page illustrates the rear panel connectors on the Power Macintosh 7300, 7500, and 7600 computers, which include the following ports: SCSI, AAUI Ethernet, 10BASE-T Ethernet, serial printer (GeoPort compatible), serial modem (GeoPort compatible), DB-15 video, ADB, sound input, sound output, composite video input (Power Macintosh 7500 and 7600 only), S-video input (Power Macintosh 7500 and 7600 only), left and right audio input (Power Macintosh 7500 and 7600 only), left and right audio output (Power Macintosh 7500 and 7600 only).





**Figure: Power Macintosh 7300, 7500, and 7600 Rear Panel**



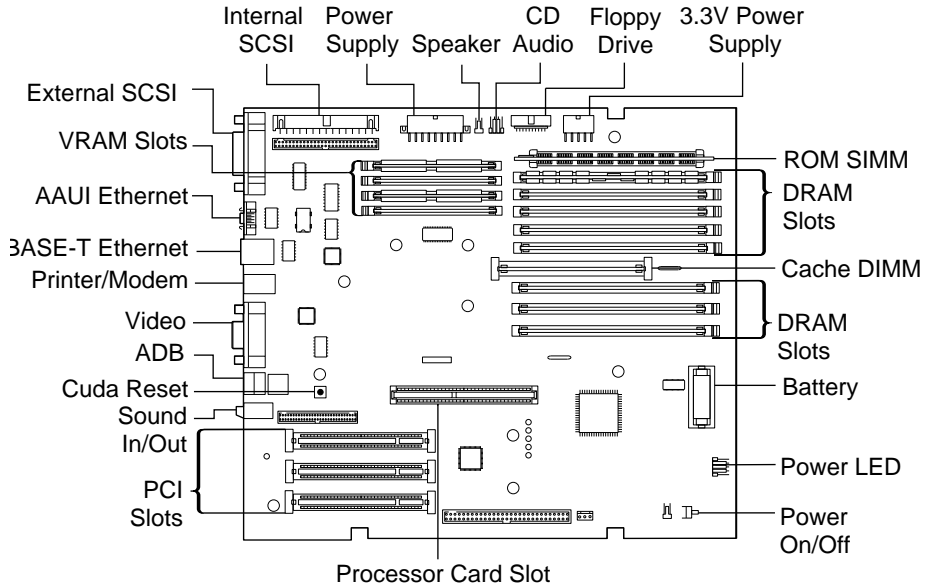


## Logic Board Diagram

The following drawing illustrates the connectors on the Power Macintosh 7300, 7500, and 7600 logic boards.

**Note:** Some versions of the logic boards have a ROM SIMM while other versions have the ROM soldered on the logic board.





**Figure: Power Macintosh 7300, 7500, and 7600 Logic Board**







## Repair Strategy

Service the Power Macintosh 7300, 7500, and 7600 computers through module exchange and parts replacement. Customers can request on-site service from an Apple Authorized Service Provider Plus (AASP+) or Apple Assurance. They can also choose carry-in service from an AASP.

## Ordering

Apple Service Providers planning to support the Power Macintosh 7300, 7500, and 7600 computers may purchase Service modules and parts to develop servicing capability. To order parts, use the AppleOrder system and refer to the Power Macintosh 7300, 7500, or 7600 "Service Price Pages."





Large businesses, universities, and K-12 accounts must provide a purchase order on all transactions, including orders placed through the AppleOrder system. Service providers not enrolled in AppleOrder may fax their orders to Service Provider Support (512-908-8125) or mail them to

Apple Computer, Inc.  
Service Provider Support  
MS 212-SPS  
Austin, TX 78714-9125

If you have further questions, please call Service Provider Support at 800-919-2775 and select option #1.





## Warranty and AppleCare

The Power Macintosh 7300, 7500, and 7600 computers are covered under the Apple One-Year Limited Warranty. The AppleCare Service Plan is also available for these products. Service Providers are reimbursed for warranty and AppleCare repairs made to these computers. For pricing information, refer to "Service Price Pages."





## Specifications

---

Power Macintosh 7300, 7500, and  
7600 Series





# Processor

## CPU

**PM 7300/166**  
**(Europe and Japan)**

PowerPC 604e RISC microprocessor running at 166 MHz  
Built-in FPU  
Requires system software version 7.5.5 or later

**PM 7300/180**

PowerPC 604e RISC microprocessor running at 180 MHz  
Built-in FPU  
Requires system software version 7.5.5 or later

**PM 7300/200**

PowerPC 604e RISC microprocessor running at 200 MHz  
Built-in FPU  
Requires system software version 7.5.5 or later





- PM 7500/100** PowerPC 601 RISC microprocessor running at 100 MHz  
Built-in FPU  
Requires system software version 7.5.2 or later with appropriate Enabler version
- PM 7600/120** PowerPC 604 RISC microprocessor running at 120 MHz  
Built-in FPU  
Requires system software version 7.5.3 or later with appropriate Enabler version
- PM 7600/132** PowerPC 604 RISC microprocessor running at 132 MHz  
Built-in FPU  
Requires system software version 7.5.3 Revision 2 or later
- PM 7600/200 (Japan)** PowerPC 604e RISC microprocessor running at 200 MHz  
Built-in FPU  
Requires system software version 7.5.5 or later





# Memory

## DRAM

<b>PM 7300 Series</b>	16 or 32 MB standard; expandable to 512 MB Uses 168-pin, 64-bit, 60 ns or faster EDO DRAM DIMMs
<b>PM 7500/100</b>	8 or 16 MB standard; expandable to 512 MB Uses 168-pin, 64-bit, 70 ns or faster DRAM DIMMs
<b>PM 7600/120 and 7600/132</b>	16 or 32 MB standard; expandable to 512 MB Uses 168-pin, 64-bit, 70 ns or faster DRAM DIMMs
<b>PM 7600/200 (Japan)</b>	16 or 32 MB standard; expandable to 512 MB Uses 168-pin, 64-bit, 60 ns or faster EDO DRAM DIMMs





<b>Cache</b>	Supports 256K, 512K, or 1 MB Level 2 cache DIMM (160-pin, 11 ns)
<b>ROM</b>	4 MB ROM (may be installed in ROM SIMM slot, or soldered on the logic board)
<b>Clock/Calendar</b>	CMOS custom circuitry with long-life battery







## I/O Interfaces

<b>SCSI</b>	Dual-channel asynchronous SCSI interface; external channel supports up to seven SCSI devices; internal channel supports a hard disk array
<b>Serial</b>	Two RS-232/RS-422 serial ports compatible with LocalTalk and GeoPort cables; mini DIN-8 connectors
<b>ADB</b>	One Apple Desktop Bus port for a keyboard, mouse, etc.
<b>Ethernet</b>	One AAUI and one 10BASE-T Ethernet port (if cables are plugged into both ports, system defaults to 10BASE-T)





**Expansion**

Three PCI expansion slots, compatible with all PCI 2.0 specification-compliant cards with the addition of Mac OS-specific software driver (not NuBus compatible)

**Sound**

16-bit stereo sound input and output ports

**Video**

Built-in DB-15 video connector on logic board

**PM 7500 and 7600 Series**

24-bit video input connectors on AV module





## I/O Devices

### **Keyboard**

Standard, extended, or adjustable keyboard; keyboard draws 25-80 mA, depending on model type

### **Mouse**

ADB Mouse II; mouse draws up to 10 mA

### **Microphone**

Apple PlainTalk microphone standard





# Video Support

**Table 1: Video Table**

	PIXEL DEPTHS	
MONITOR DISPLAY SIZE	2 MB VRAM*	4 MB VRAM*
512 by 384	8, 16, 32	8, 16, 32
640 by 480	8, 16, 32	8, 16, 32
768 by 576	8, 16, 32	8, 16, 32
800 by 600	8, 16, 32	8, 16, 32
832 by 624	8, 16, 32	8, 16, 32
1024 by 768	8, 16	8, 16, 32
1152 by 870	8, 16	8, 16



**Table 1: Video Table**

MONITOR DISPLAY SIZE	PIXEL DEPTHS	
	2 MB VRAM*	4 MB VRAM*
1280 by 960	8	8, 16
1280 by 1024	8	8, 16

\*The Power Macintosh 7300, 7500, and 7600 Series computers do not have any VRAM soldered on the logic board; VRAM DIMMs must be present to display any video. The computer comes with two 1 MB VRAM DIMMs installed. You can upgrade to 4 MB of VRAM by installing two more 1 MB VRAM DIMMs in the remaining slots. VRAM DIMMs must be installed in matching pairs and in paired slots.





## Disk Storage

### Hard Drive

<b>PM 7300 Series</b>	2 GB fast internal SCSI hard drive
<b>PM 7500/100</b>	500 MB or 1 GB fast internal SCSI hard drive
<b>PM 7600 Series</b>	1.2 GB fast internal SCSI hard drive
<b>PM 7600/200 (Japan)</b>	2 GB fast internal SCSI hard drive

### Floppy Drive

One Apple SuperDrive 1.4 MB floppy drive

### CD-ROM Drive

<b>PM 7300 Series</b>	One internal AppleCD 1800i 12x CD-ROM drive
<b>PM 7500/100</b>	One internal AppleCD 600i 4x CD-ROM drive
<b>PM 7600/120</b>	One internal AppleCD 600i 4x CD-ROM drive
<b>PM 7600/132</b>	One internal AppleCD 1200i 8x CD-ROM drive
<b>PM 7600/200 (Japan)</b>	One internal AppleCD 1800i 12x CD-ROM drive





## Electrical

<b>Line Voltage</b>	100-240 VAC, RMS single phase, automatically configured
<b>Frequency</b>	50-60 Hz, single phase
<b>Maximum Power</b>	150 W maximum, not including monitor





# Physical

## Dimensions

<b>Height:</b>	6.15 in. (15.6 cm)
<b>Width:</b>	14.37 in. (36.5 cm)
<b>Depth:</b>	16.93 in. (43.0 cm)
<b>Weight:</b>	22 lb. (9.97 kg); weight varies depending on devices installed







## Environmental

**Operating  
Temperature**

50 to 104° F (10 to 40° C)

**Storage  
Temperature**

-40 to 116° F (-40 to 47° C)

**Relative Humidity**

5–95% noncondensing

**Maximum Altitude**

10,000 ft. (3,048 m)





## Troubleshooting

---

Power Macintosh 7300, 7500, and  
7600 Series





## General

The Symptom Charts included in this chapter will help you diagnose specific symptoms related to your product. Because cures are listed on the charts in the order of most likely solution, try the first cure first. Verify whether or not the product continues to exhibit the symptom. If the symptom persists, try the next cure. (Note: If you have replaced a module, reinstall the original module before you proceed to the next cure.)

If you are not sure what the problem is, or if the Symptom Charts do not resolve the problem, refer to the Flowchart for the product family.

For additional assistance, contact Apple Technical Support.





## Cleaning Procedure for Card Connectors

It is possible for residue to build up on the gold edge connector pins on some PCI cards, which could cause a variety of symptoms.

If you are having problems with a PCI card, inspect the connector pins with a magnifying glass. If you find residue, use a pencil eraser to gently clean the pins.





# Symptom Charts

## Power Supply

System doesn't power up

- 1 Reseat processor card and ROM SIMM (if present).
- 2 On Power Macintosh 7500/100 systems only, check the cache DIMM. If cache DIMM has part number 820-0719-B printed on its PCB, remove DIMM and replace with part number 661-1310.
- 3 Reset Cuda chip. (Refer to “The Cuda Chip” in Basics for instructions.)
- 4 Reset logic board. (Refer to “Resetting the Logic Board” in Basics for instructions.)
- 5 Replace power supply.
- 6 Replace processor card.
- 7 Replace logic board.





## Error Chords

One-part error chord sounds during startup sequence

- 1 Disconnect SCSI data cable from hard drive and reboot system. If startup sequence is normal, initialize hard drive. Test unit again with SCSI data cable connected. If error chord still sounds, replace hard drive.
- 2 Disconnect floppy drive cable from floppy drive and reboot system. If startup sequence is normal, replace floppy drive.
- 3 Reseat processor card.
- 4 Replace processor card.
- 5 Replace logic board. Retain customer's DIMMs.

Eight-part error chord (death chimes) sounds during startup sequence

- 1 Replace DRAM DIMMs one at a time to test DRAM. Replace any faulty DIMMs.
- 2 Replace logic board.





## System

Does not power on,  
screen is black, fan is  
not running and LED  
is not lit

- 1 Check power cables.
- 2 Plug monitor directly into wall socket, and verify that monitor has power.
- 3 Reseat ROM SIMM (if present) and processor card. The logic board must have a processor card installed to operate.
- 4 Reset Cuda chip. (Refer to “The Cuda Chip” in Basics for instructions.)
- 5 Reset logic board. (Refer to “Resetting the Logic Board” in Basics for instructions.)
- 6 Replace power cord.
- 7 Replace power supply.
- 8 Replace processor card.
- 9 Replace logic board. Retain customer's DIMMs.





Clicking, chirping,  
or thumping

- 1 Remove all PCI cards and test the unit. If problem does not occur with cards removed, begin replacing them one at a time to determine which card is causing the problem. Replace problem card with known-good card.
- 2 Remove hard drive. If problem no longer occurs, replace hard drive with a known-good drive.
- 3 Replace power supply.
- 4 Replace processor card.
- 5 Replace logic board. Retain customer's DIMMs.
- 6 Replace floppy drive cable.
- 7 Replace floppy drive.







System shuts down  
intermittently

- 1 Make sure air vents are clear. Thermal protection circuitry may shut down system. After 30 to 40 minutes, system should be OK.
- 2 Make sure power cord is firmly plugged in.
- 3 Replace power cord.
- 4 Check battery.
- 5 Reset Cuda chip. (Refer to “The Cuda Chip” in Basics for instructions.)
- 6 Reset logic board. (Refer to “Resetting the Logic Board” in Basics for instructions.)
- 7 Replace power supply.
- 8 Replace processor card.
- 9 Replace logic board. Retain customer's DIMMs.





System  
intermittently  
crashes or hangs

- 1 Verify system software is version 7.5.2 or later (Power Macintosh 7500), 7.5.3 or later (Power Macintosh 7600), or 7.5.5 or later (Power Macintosh 7300).
- 2 Verify DIMMs are noncomposite.
- 3 On Power Macintosh 7500/100 systems only, check the cache DIMM. If cache DIMM has part number 820-0719-B printed on its PCB, remove DIMM and replace with part number 661-1310.
- 4 Verify software is known-good. Do a clean install of the system software.
- 5 Verify software is Power Macintosh 7300, 7500, or 7600 compatible (contact developer). Also, try booting with extensions off to determine if there are system init problems.
- 6 If system serial number is XB633XXX8L or less and has a 132 MHz card installed, replace the card.
- 7 Clear parameter RAM. Hold down <Command> <Option> <P> <R> during startup but before "Welcome to Macintosh" appears.





- 8 Remove all DRAM DIMMs and try replacing them one at a time to test. Replace any bad DIMMs.
- 9 Replace processor card.
- 10 Replace logic board. Retain DIMMs.

During startup, following message is displayed, "This startup disk will not work on this Macintosh model...."

- 1 Verify that startup disk is good.
- 2 Verify system software is version 7.5.2 or later (Power Macintosh 7500), 7.5.3 or later (Power Macintosh 7600), or 7.5.5 or later (Power Macintosh 7300).
- 3 Do a clean install of the system software.





## Video

Screen is black, boot tone is present, drive operates, fan is running, and LED is lit

- 1 Adjust brightness on monitor.
- 2 Clear parameter RAM. Hold down <Command> <Option> <P> <R> during startup but before "Welcome to Macintosh" appears.
- 3 Reset Cuda chip. (Refer to "The Cuda Chip" in Basics.)
- 4 Reset logic board. (See "Resetting Logic Board" in Basics.)
- 5 Replace monitor cable.
- 6 Remove all DRAM DIMMs and try replacing them one at a time to test. Replace any bad DIMMs.
- 7 Test with known-good monitor. Replace monitor if necessary. Refer to appropriate monitor manual to troubleshoot defective monitor.
- 8 Replace processor card.
- 9 Replace logic board. Retain customer's DIMMs.





Screen is black, no boot tone and drive does not operate, but fan is running and LED is lit

- 1 Reset Cuda chip. (Refer to “The Cuda Chip” in Basics for instructions.)
- 2 Reset logic board. (Refer to “Resetting the Logic Board” in Basics for instructions.)
- 3 Remove all DRAM DIMMs and try replacing them one at a time to test. Replace any bad DIMMs.
- 4 Replace processor card.
- 5 Replace logic board. Retain customer's DIMMs.
- 6 Replace power supply.





Boot tone is present and screen lights up, but nothing is displayed on screen

- 1 Reset Cuda chip. (Refer to “The Cuda Chip” in Basics for instructions.)
- 2 Reset logic board. (Refer to “Resetting the Logic Board” in Basics for instructions.)
- 3 Replace monitor cable.
- 4 Test with known-good monitor. Replace monitor if necessary. Refer to appropriate monitor manual to troubleshoot defective monitor.
- 5 Replace processor card.
- 6 Replace logic board. Retain customer's DIMMs.





Video display  
distorted on Power  
Macintosh 7500 with  
DAV card installed

Symptom occurs when an add-in card attached to the DAV connector requires a mode configuration under which the add-in card controls most of the signal lines (Mode 2). Verify that the logic board installed supports DAV cards; if not, replace the logic board.

If the logic board in question meets **either** of the following criteria, then it **DOES** support DAV cards and you need not replace the board:

- Part number 820-0752 is silk-screened on the logic board.
- The Logic board has the wiring scenario shown on the next page.

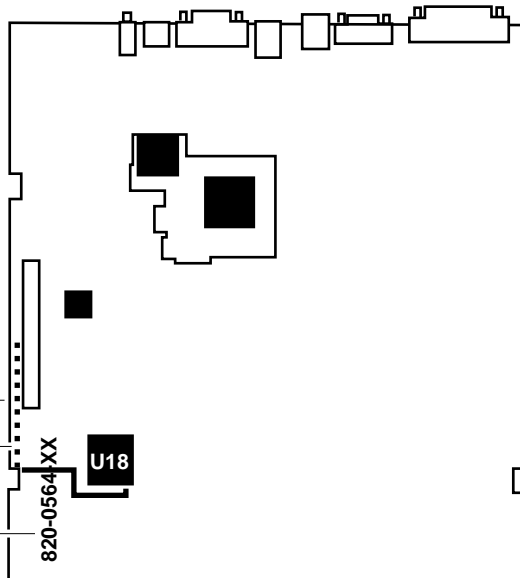




**NOTE:** The dotted line indicates that the jumper wire is running underneath the logic board.

Jumper Wire

PCB Part Number



**Power Macintosh 7500 Logic Board with DAV Fix**







## Floppy Drive

Internal floppy drive  
does not operate

- 1 Replace floppy disk with known-good disk.
- 2 Replace floppy drive cable.
- 3 Replace floppy drive.
- 4 Replace processor card.
- 5 Replace logic board. Retain customer's DIMMs.

During system  
startup, disk ejects;  
display shows icon  
with blinking "X"

- 1 Replace disk with known-good system disk.
- 2 Replace floppy drive cable.
- 3 Replace floppy drive.
- 4 Replace processor card.
- 5 Replace logic board. Retain customer's DIMMs.





Does not eject disk	<ol style="list-style-type: none"><li data-bbox="448 96 1418 184">1 Switch off computer. Hold mouse button down while you switch computer on.</li><li data-bbox="448 194 951 236">2 Replace floppy drive cable.</li><li data-bbox="448 241 859 282">3 Replace floppy drive.</li><li data-bbox="448 288 897 329">4 Replace processor card.</li><li data-bbox="448 334 1267 376">5 Replace logic board. Retain customer's DIMMs.</li></ol>
Attempts to eject disk, but doesn't	<ol style="list-style-type: none"><li data-bbox="448 427 1398 521">1 Reseat floppy drive bezel and drive so bezel slot aligns correctly with drive.</li><li data-bbox="448 526 859 567">2 Replace floppy drive.</li></ol>
Internal floppy drive runs continuously	<ol style="list-style-type: none"><li data-bbox="448 614 1205 655">1 Replace disk with known-good floppy disk.</li><li data-bbox="448 660 951 702">2 Replace floppy drive cable.</li><li data-bbox="448 707 859 749">3 Replace floppy drive.</li><li data-bbox="448 754 897 795">4 Replace processor card.</li><li data-bbox="448 800 1267 848">5 Replace logic board. Retain customer's DIMMs.</li></ol>





MS-DOS drive does not recognize a disk formatted on a 1.4 MB drive

- 1 To read and write files with either MS-DOS or 1.4 MB drive, format all disks with MS-DOS drive first.





## Hard Drive

Single internal hard drive does not operate; drive doesn't spin

- 1 Replace hard drive power cable.
- 2 Replace hard drive. If problem resolved, reinstall SCSI device driver and system software.
- 3 Replace power supply.

No internal SCSI drives operate

- 1 Verify there are no duplicate SCSI device addresses.
- 2 Disconnect external SCSI devices and check for proper termination. Only last device in SCSI chain should be terminated.
- 3 Replace SCSI data cable.
- 4 Replace power supply.
- 5 Replace processor card.
- 6 Replace logic board. Retain customer's DIMMs.





Drive does not appear on the desktop

- 1 Verify there are no duplicate SCSI device addresses.
- 2 Update the SCSI device driver using Drive Setup. Check drive's directory structure using Disk First Aid.
- 3 Replace SCSI hard drive cable.
- 4 If drive is not initialized, use Drive Setup to initialize.
- 5 Replace with known-good hard drive.
- 6 If hard drive still doesn't work, switch back to original hard drive and replace logic board.

Works with internal or external SCSI devices but not with both

- 1 Verify there are no duplicate SCSI device addresses.
- 2 Replace terminator on external SCSI device.
- 3 Verify that SCSI device at end of internal SCSI data cable is only device terminated.
- 4 Refer to appropriate manual to troubleshoot defective external device.





## Peripherals

Cursor does not move

- 1 Check mouse connection.
- 2 Inspect inside of mouse for buildup of dirt or other contaminants. Clean mouse if necessary.
- 3 If mouse was connected to keyboard, connect mouse to computer ADB port instead. If mouse works, replace keyboard.
- 4 Replace ADB cable.
- 5 If mouse does not work in any ADB port on computer, replace mouse.
- 6 Replace processor card.
- 7 Replace logic board. Retain customer's DIMMs.

Cursor moves, but clicking mouse button has no effect

- 1 Boot from floppy or bootable CD.
- 2 Replace mouse.
- 3 Replace logic board. Retain customer's DIMMs.





Double-click doesn't open application, disk, or server

- 1 Remove duplicate system folders.
- 2 Clear parameter RAM. Hold down <Command> <Option> <P> <R> during startup but before "Welcome to Macintosh" appears.
- 3 If mouse was connected to keyboard, connect mouse to computer ADB port instead. If mouse works, replace keyboard.
- 4 If mouse does not work in any ADB port on computer, replace mouse.
- 5 Replace logic board. Retain customer's DIMMs.

No response to any key on keyboard

- 1 Check keyboard connection to ADB port.
- 2 Replace keyboard cable.
- 3 Replace keyboard.
- 4 Replace logic board. Retain customer's DIMMs.





Known-good serial  
printer does not work

- 1 Verify you have correct version of system software.
- 2 Verify that Chooser is set correctly.
- 3 Reinstall correct printer drivers.
- 4 Do clean install of system software.
- 5 Replace printer interface cable.
- 6 Replace logic board. Retain customer's DIMMs.

Known-good network  
printer does not print

- 1 Check network connections.
- 2 Verify you have correct version of system software.
- 3 Verify that Chooser is set correctly.
- 4 Does printer show up in Chooser? If so, do clean install of system software and/or network and printer software.
- 5 Replace logic board. Retain customer's DIMMs.







## CD-ROM Drive

CD-ROM drive does not work

- 1 Try using known-good compact disc.
- 2 Replace CD-ROM drive mechanism.

Macintosh does not display CD-ROM icon once CD is inserted in drive

- 1 Verify that CD-ROM software is installed.
- 2 Replace CD-ROM drive mechanism.
- 3 Replace SCSI data cable.
- 4

Computer with 600i CD-ROM drive makes stuttering sounds when playing CD+ or CD-R formatted discs or CD-ROM disc won't mount

Replace CD-ROM drive.





## Miscellaneous

No sound from  
speaker

- 1 Verify that volume setting in Control Panel is 1 or above.
- 2 Clear parameter RAM. Hold down <Command> <Option> <P> <R> during startup but before "Welcome to Macintosh" appears.
- 3 Verify speaker is plugged into logic board.
- 4 Replace speaker.
- 5 Replace logic board. Retain customer's DIMMs.





Errors occur when initializing or erasing floppy disks and/or 1.4 MB disks show only 1 MB available after initialization

This problem only occurs on systems using a 180 MHz or faster processor card. Upgrade to system software version 7.5.4 or later to resolve this problem (the Apple recommended solution) or, alternatively, install the Power Mac Format Patch, which can be found on the original system disks that shipped with the computer. To install the patch:

- While holding down the Option key, drag the Power Mac Format Patch icon onto the System Folder's icon.
- Click OK to automatically place the patch in the Extensions folder.
- Restart the computer by choosing Restart from the Special menu.





## Take Apart

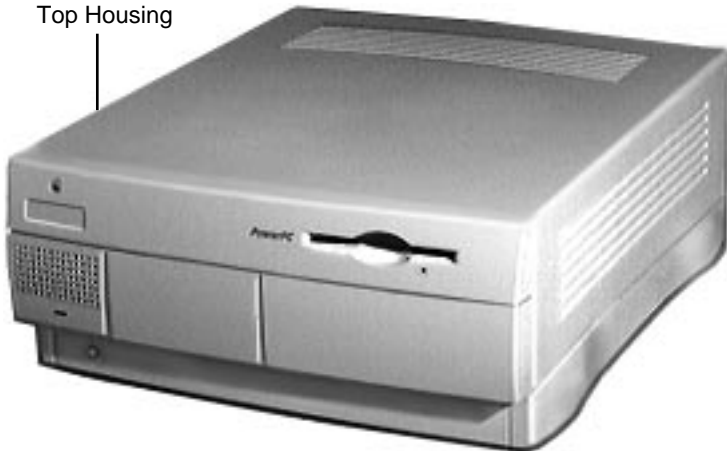
---

Power Macintosh 7300, 7500, and  
7600 Series





Top Housing



## Top Housing

No preliminary steps are required before you begin this procedure.

**Note:** The top housing covers the top, front, and left and right sides of the computer.





- 1 Press the two tabs at the front corners of the top housing to release the top housing from the bottom chassis.





- 2 Pull the top housing forward about 1 to 2 inches and lift straight up to remove the top housing from the computer.





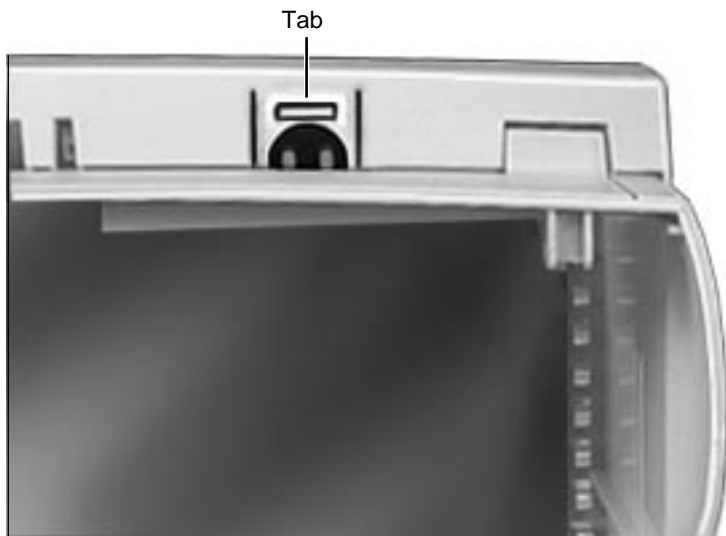
## Bezels

Before you begin, remove the top housing.

**Note:** As you face the computer, the bezels are in the middle of the top housing's front panel.

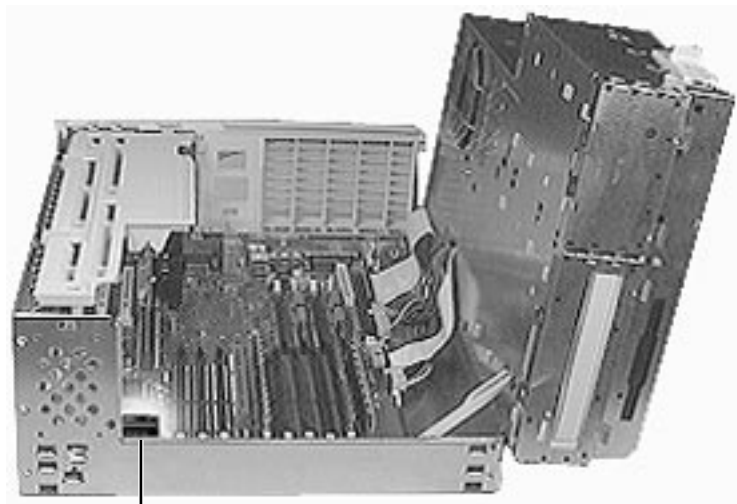






- 1 From the inside of the top housing, push out on the moon-shaped opening at the bottom of the bezel to release the tab. Lift up the bezel to remove it from the top housing.





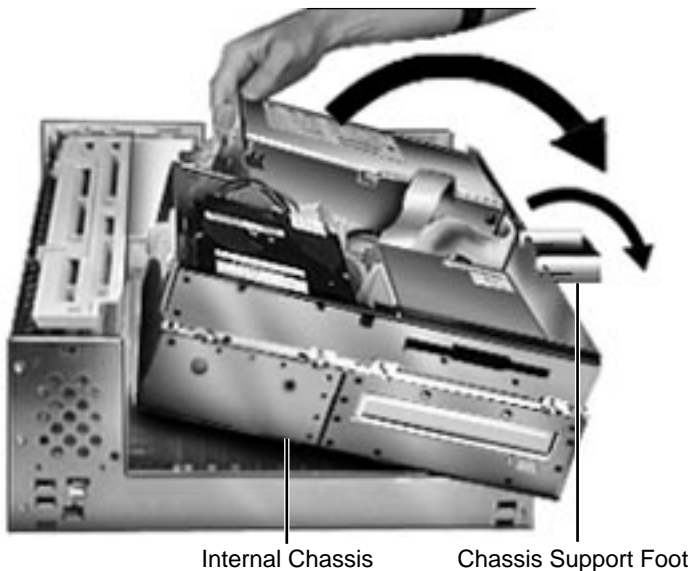
Battery

## Battery

Before you begin, remove the top housing.

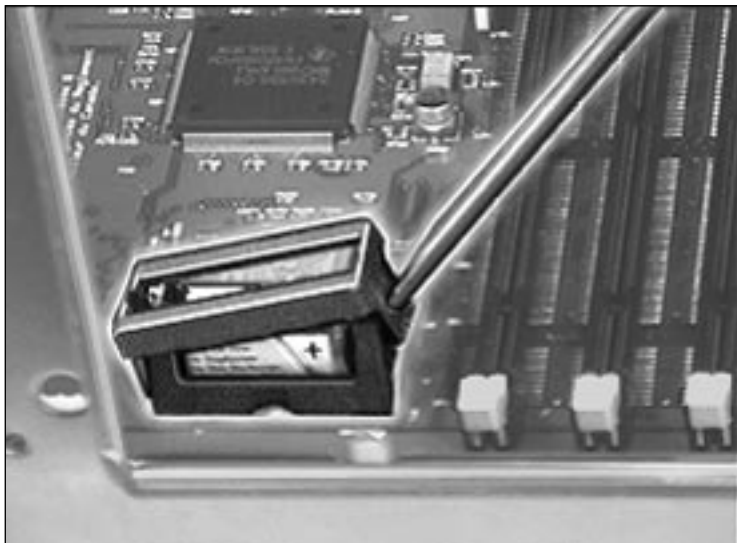
**Note:** As you face the computer, the battery is near the front left corner of the logic board.





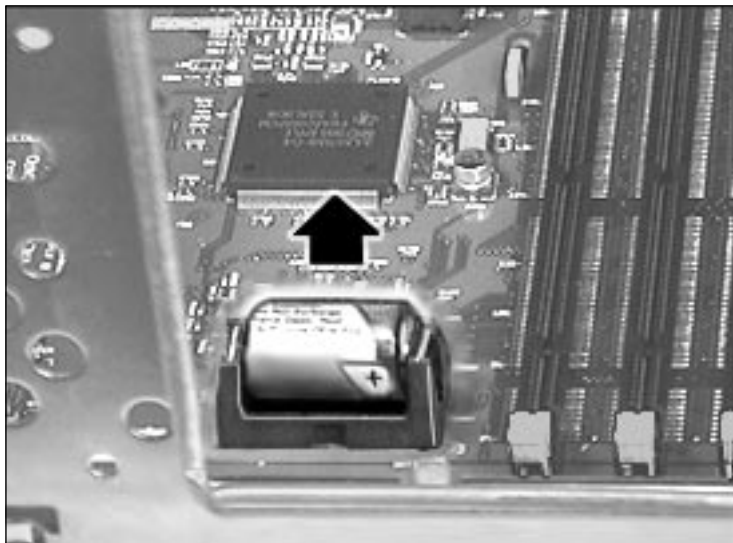
- 1 First, release the chassis latches. Next, flip open the chassis support foot and then swing open the internal chassis that contains the power supply.





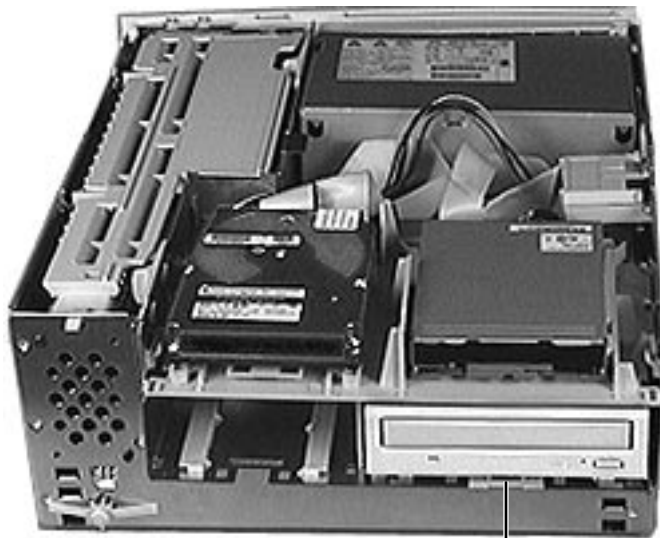
- 2 Use a screwdriver to gently pry up one side of the battery cover.





- 3 Lift up the battery to remove it from the logic board.





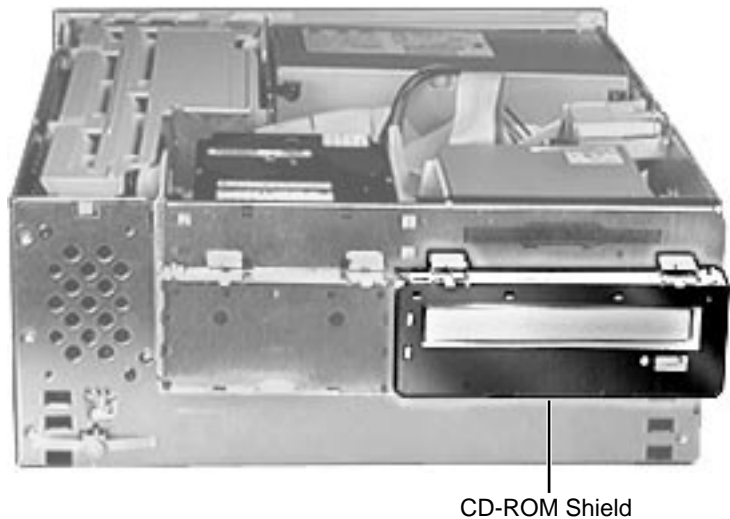
CD-ROM Drive

## CD-ROM Drive

Before you begin, remove the top housing.

**Note:** As you face the computer, the CD-ROM drive is in the bottom right drive bay.





- 1 Lift up the top tabs and pull out the CD-ROM EMI shield to remove it from the front of the CD-ROM drive.





Power Cable

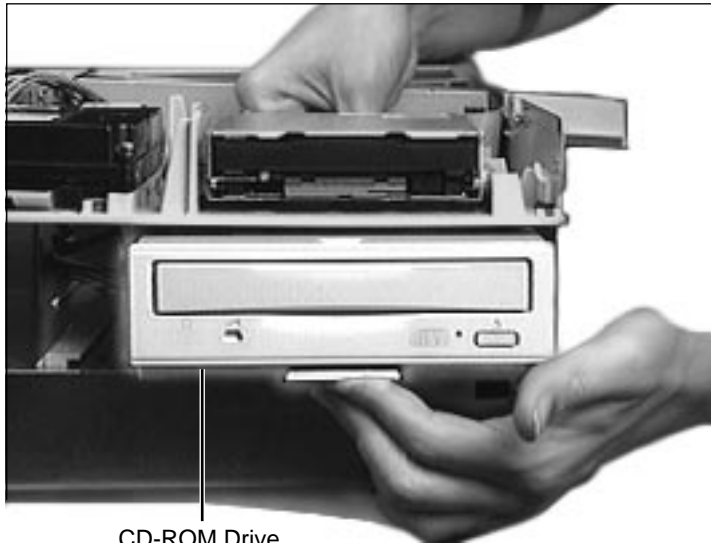
SCSI Cable

CD Audio Cable

- 2 Disconnect the SCSI cable, power cable, and CD audio cable from the back of the CD-ROM drive.







- 3 Pull up the retaining clip (which is located at the back of the CD-ROM drive) and slide the CD-ROM forward to remove it from the internal chassis.

**Note:** Be sure to remove the CD-ROM drive from its carrier before returning the drive to Apple.

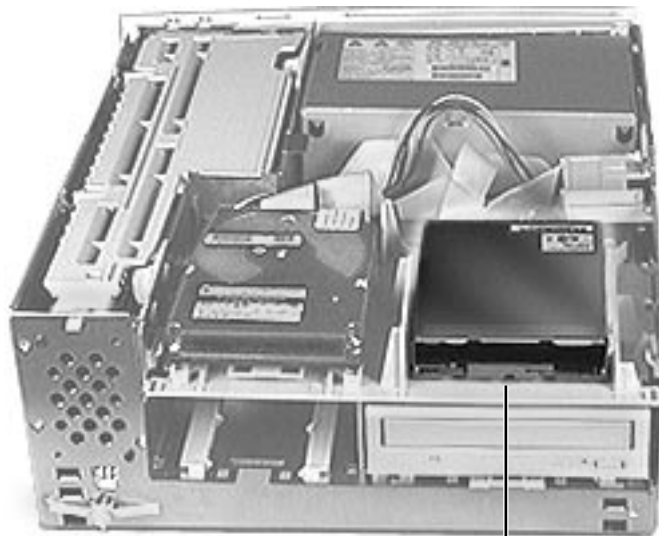




## Floppy Drive

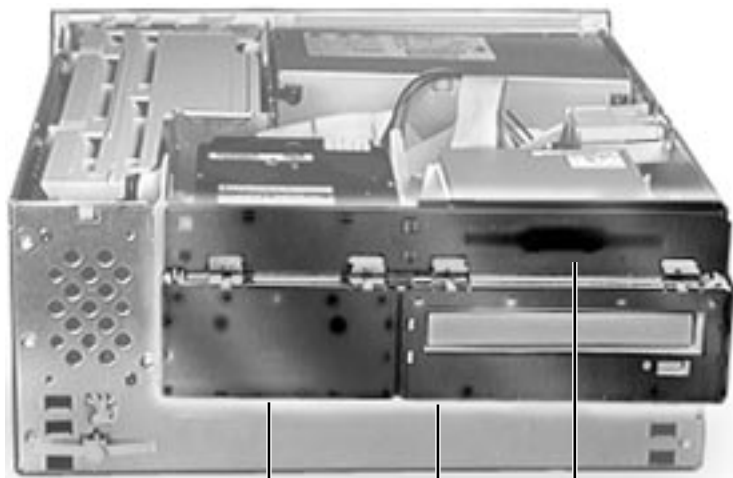
Before you begin, remove the top housing.

**Note:** As you face the computer, the floppy drive is in the top right drive bay.



Floppy Drive





Blank Shield

CD-ROM Shield

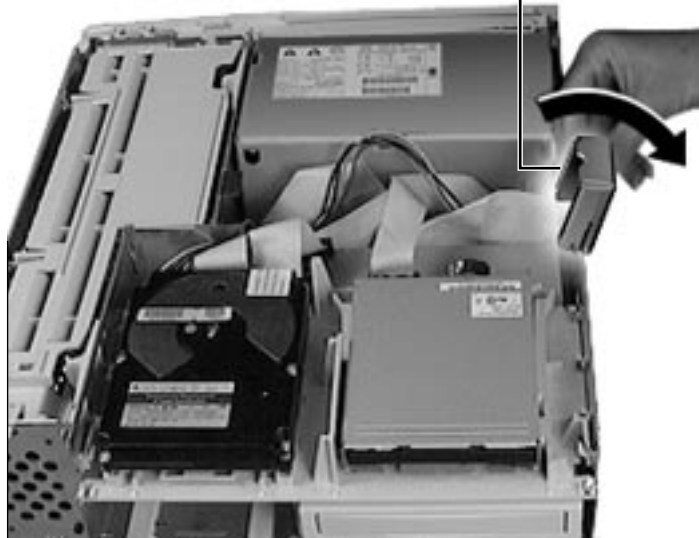
Floppy Drive Shield

- 1 Remove the CD-ROM shield, the blank shield, and the floppy drive shield from the front of the unit.





Chassis Support Foot



- 2 Flip open the chassis support foot.





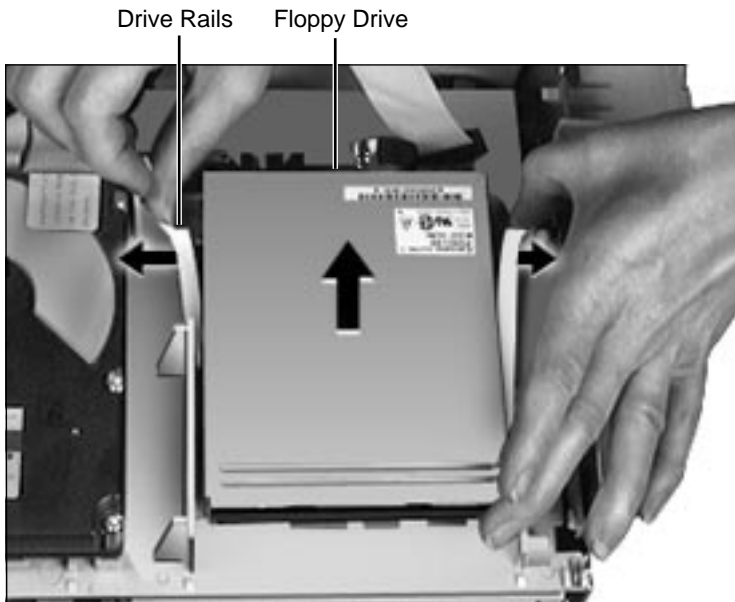
Floppy Drive Cable

Floppy Drive



- 3 Disconnect the floppy drive cable from the back of the floppy drive.





- 4 Pull out on the plastic drive rails that secure the floppy drive to the drive chassis and push back the drive to release it.

**Replacement Note:** When replacing the floppy drive, you must install an EMI gasket (p/n 922-1895). Peel off the adhesive and attach the gasket in the center of the drive's top surface, with the "V" of the gasket pointing at the front edge of the drive.

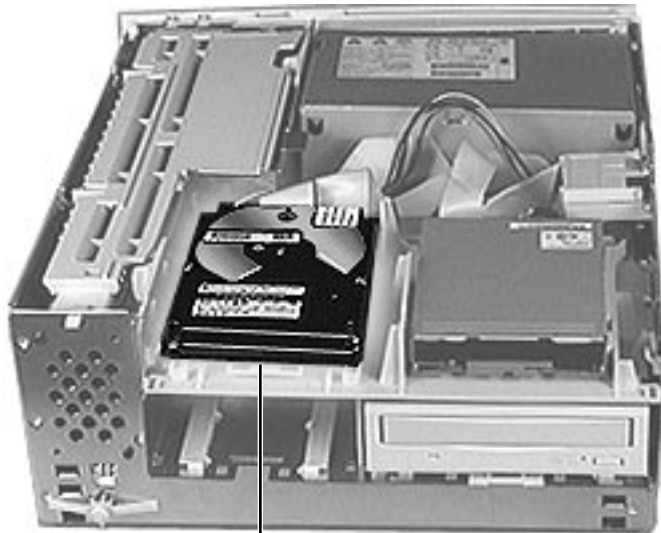




## Hard Drive

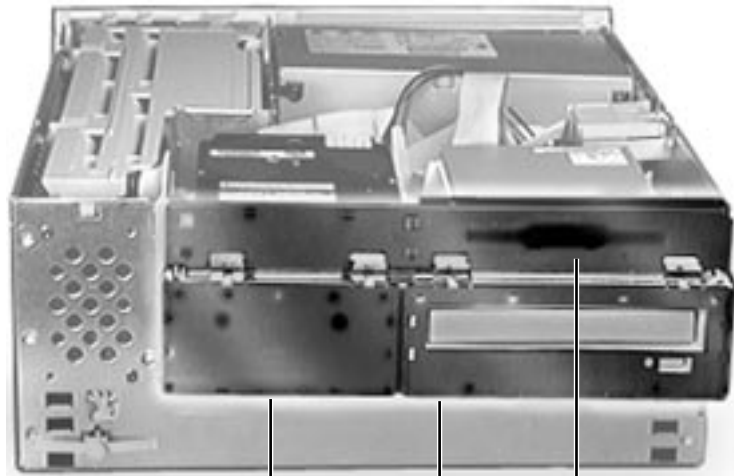
Before you begin, remove the top housing.

**Note:** As you face the computer, the hard drive is in the top left drive bay.



Hard Drive





Blank Shield

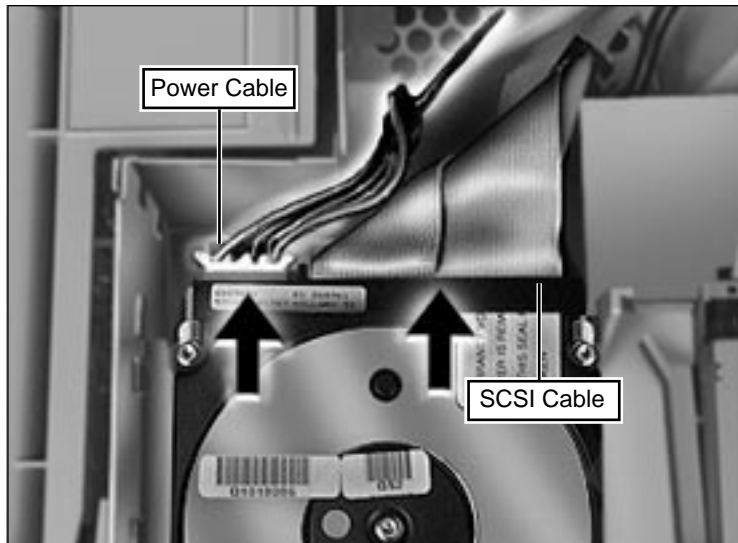
CD-ROM Shield

Floppy Drive Shield

- 1 Remove the CD-ROM shield, the blank shield, and the floppy drive shield from the front of the unit.

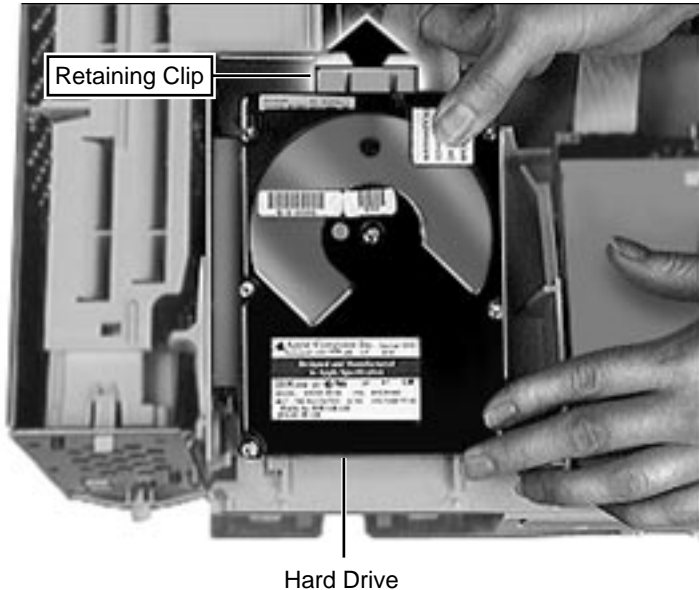






- 2 Disconnect the SCSI cable and hard drive power cable from the back of the hard drive.





- 3 Pull up the retaining clip at the back of the hard drive and push back the hard drive to remove it from the drive chassis.

**Note:** For information on removing the hard drive from its carrier and returning drives, cables, and carriers to Apple, refer to Additional Procedures in the Hard Drives manual.

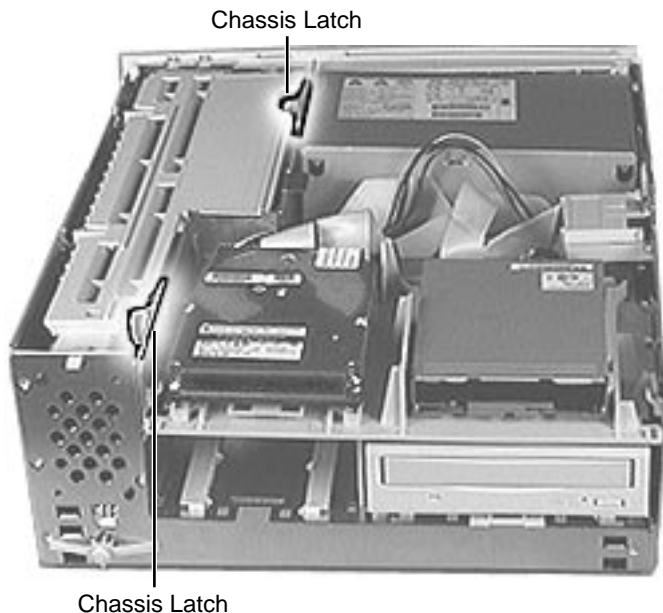


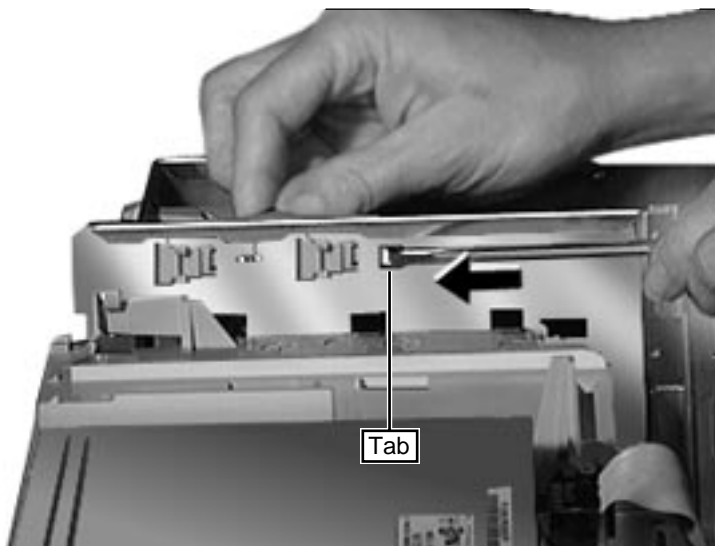


## Chassis Latch

Before you begin, remove the top housing.

**Note:** The chassis latches mount in the internal chassis and secure the internal chassis to the external chassis frame.





- 1 Use a screwdriver to push out the tab indicated in the illustration. Slide the latch forward and lift it from the chassis.



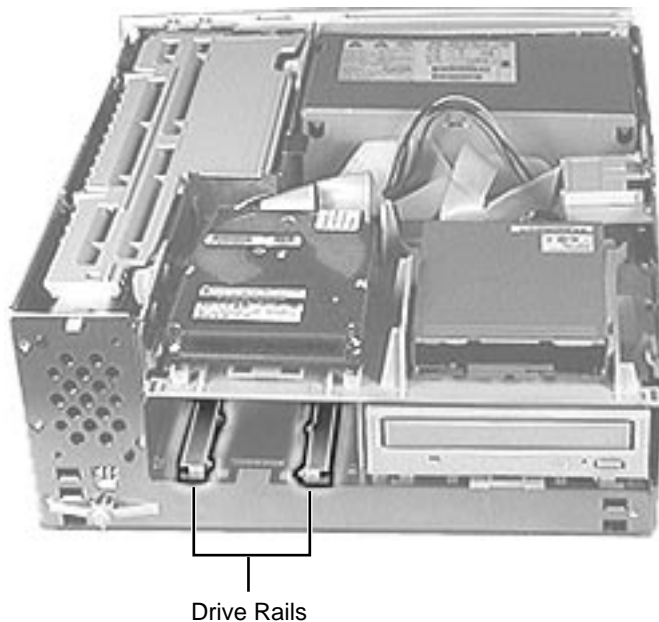


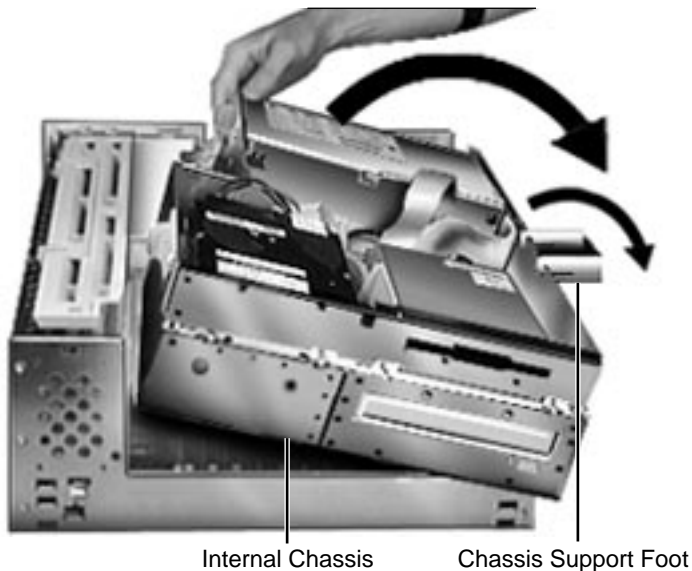
## Drive Rails

Before you begin, remove the following:

- Top Housing
- All Drives

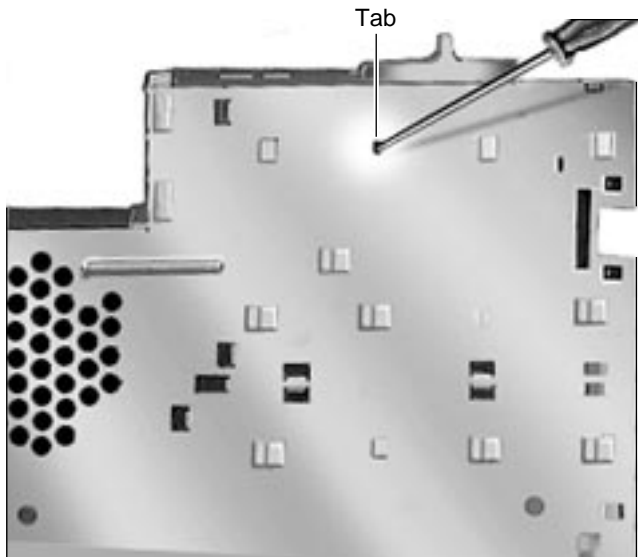
**Note:** The drive rails attach to the internal chassis underneath the CD-ROM drive and the extra hard drive bay.





- 1 First, release the chassis latches. Next, flip open the chassis support foot and then swing open the internal chassis that contains the power supply.





- 2 Use a screwdriver to push out the tab indicated in the illustration.
- 3 Slide the drive rail either forward or backward (depending on which way the tabs are facing) and lift it from the chassis.



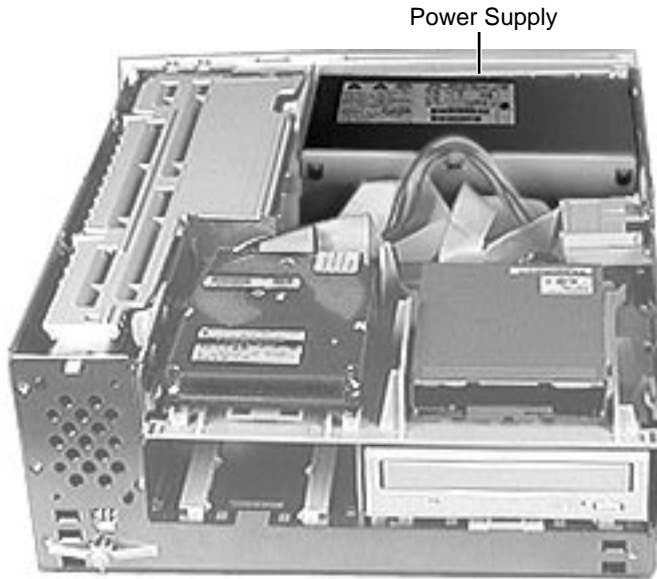


## Power Supply

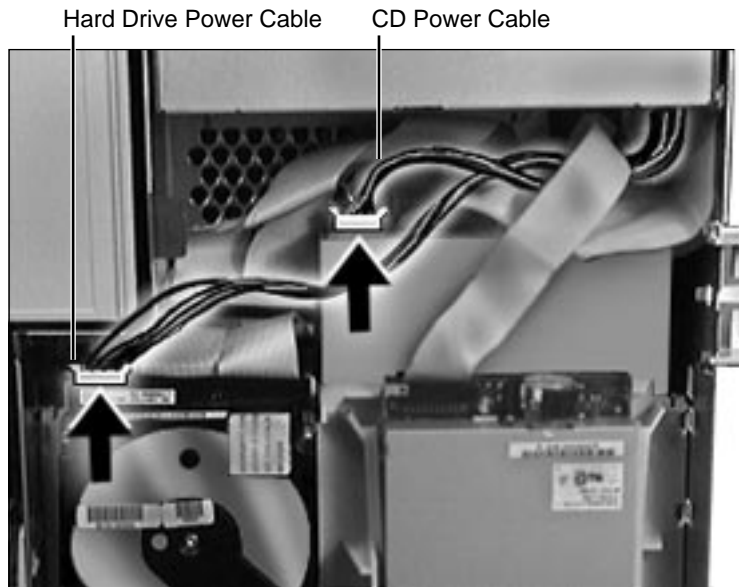
Before you begin, remove the top housing.

**Note:** As you face the computer, the power supply is in the back right corner.

**IMPORTANT:** When replacing the power supply, be sure the voltage switch on the back of the power supply is set correctly (115V in the U.S.).

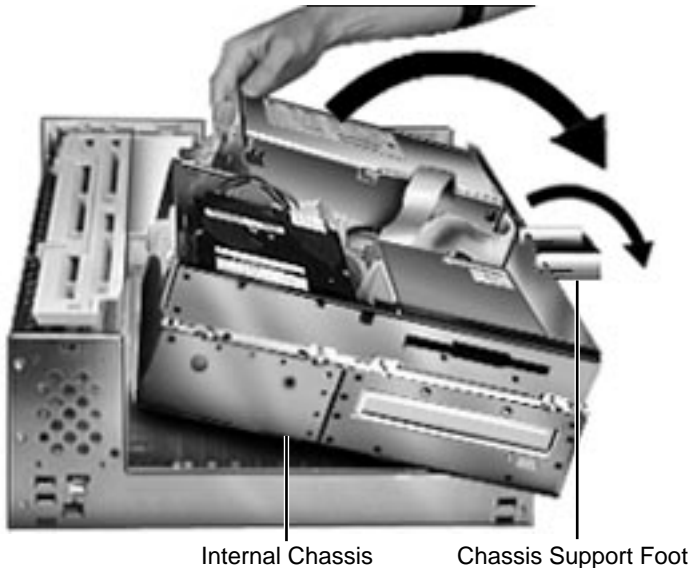






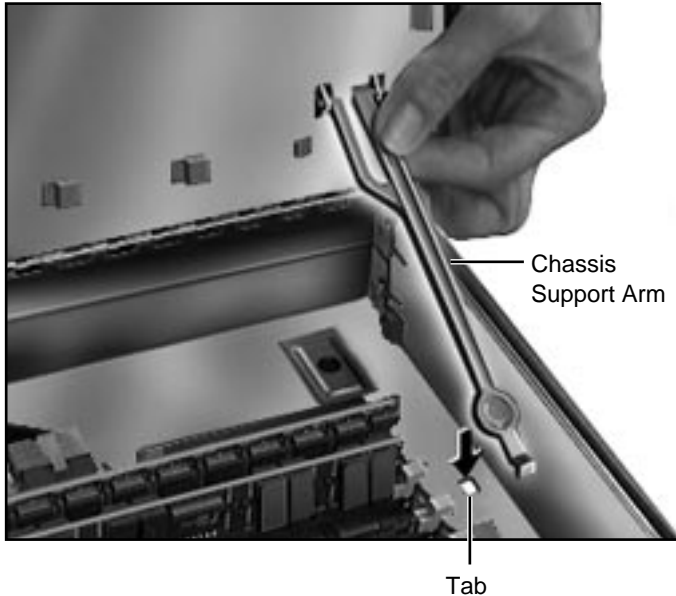
- 1 Disconnect the power supply cables from the back of the CD-ROM drive and hard drive(s).





- 2 First, release the chassis latches. Next, flip open the chassis support foot and then swing open the internal chassis that contains the power supply.





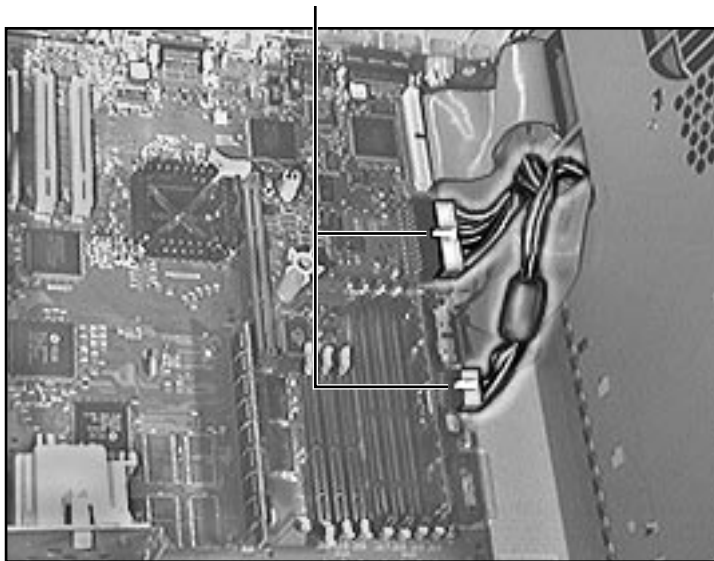
- 3 To secure the internal chassis in the up position, flip down the chassis support arm. Make sure the tab on the bottom of the support arm is securely fastened in the hole provided in the bottom chassis.

**Warning:** To be safe, never work on the computer with the internal chassis in the up position unless the chassis support arm is down and securely fastened.





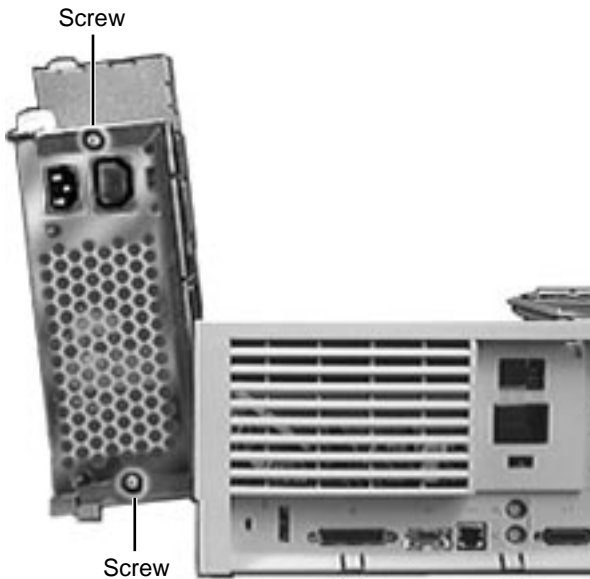
Power Supply Cables



- 4 Disconnect the power supply cables from the logic board.

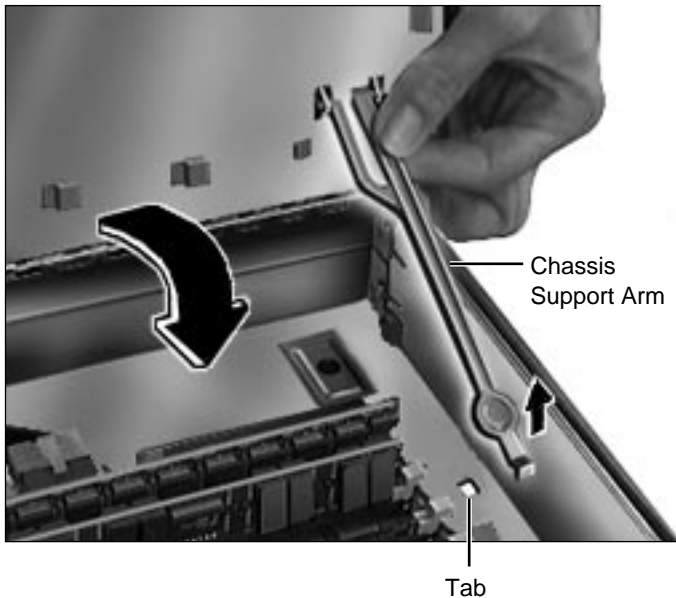
**Note:** The 10-pin power supply cable supplies 3.3 V power for the processor card. The 22-pin cable supplies 5 V and +/- 12 V power for the logic board.





- 5 From the back of the computer, remove the two screws that secure the power supply to the chassis.





- 6 Release the chassis support arm and swing down the internal chassis.





- 7 Slide the power supply forward and pull it out of the computer. You will need to feed the power supply cables that connect to the logic board up through the hole in the chassis.

**IMPORTANT:** Make sure the power supply switch on the back of the power supply is set to the correct voltage (115V in the U.S.) The switch is accessible through the computer's rear panel when the power supply is installed.

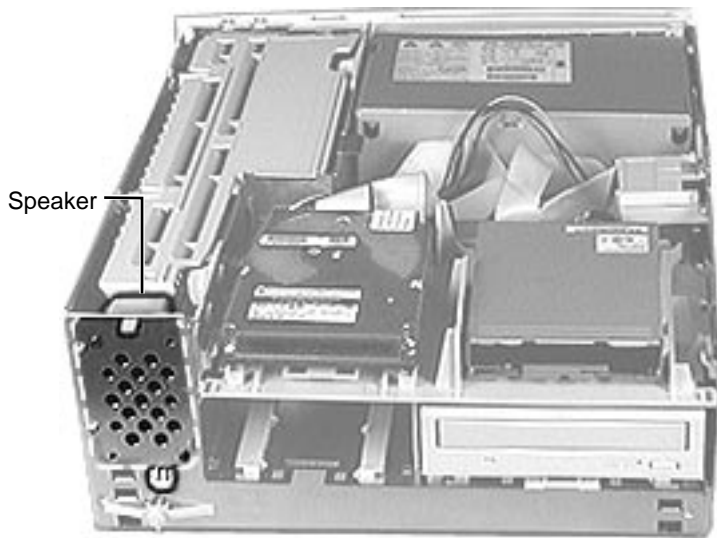




**Replacement Note:** There are two metal tabs on the back of the metal chassis that lock into the power supply. When replacing the power supply, slide it back until it locks into place.





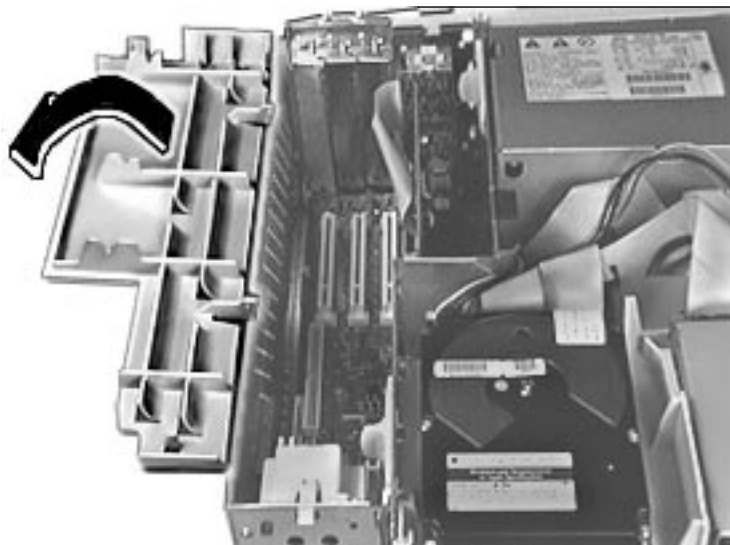


## Speaker

Before you begin, remove the top housing.

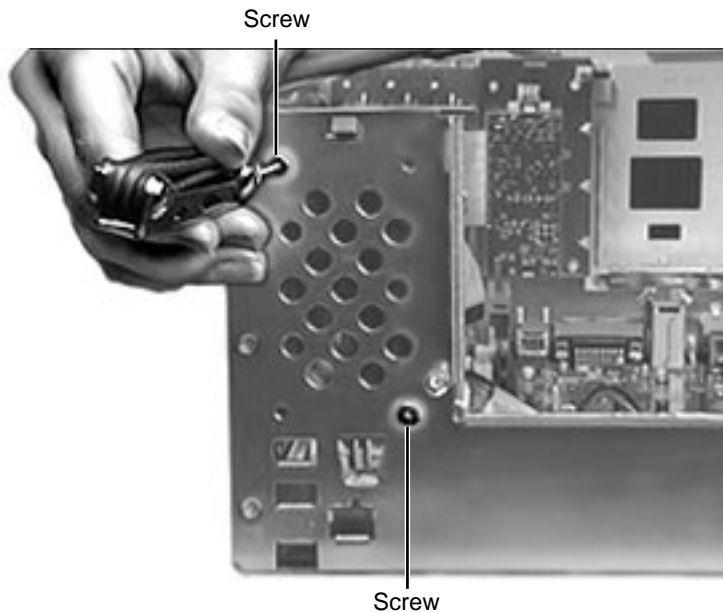
**Note:** As you face the computer, the speaker is in the front left corner of the bottom chassis.





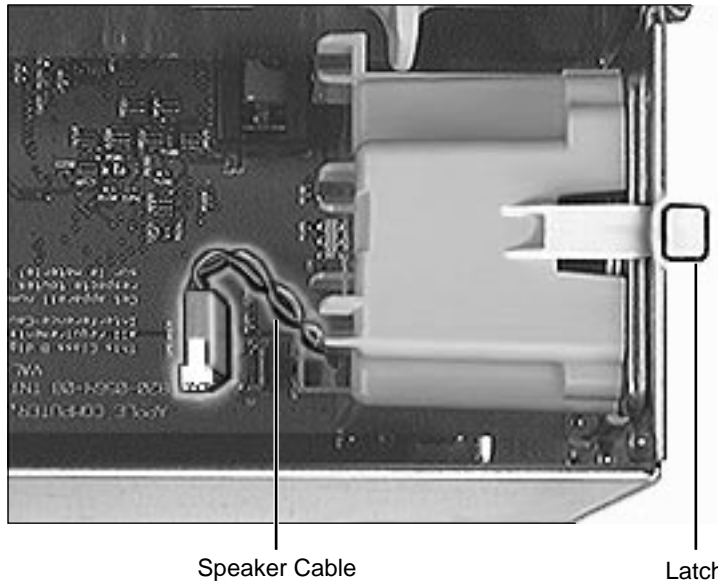
- 1 Swing open the expansion card cover.





- 2 Remove the two Torx screws that secure the speaker to the metal chassis.





- 3 Disconnect the speaker cable from the logic board.
- 4 Press the latch holding the speaker to the chassis and lift the speaker out of the computer.

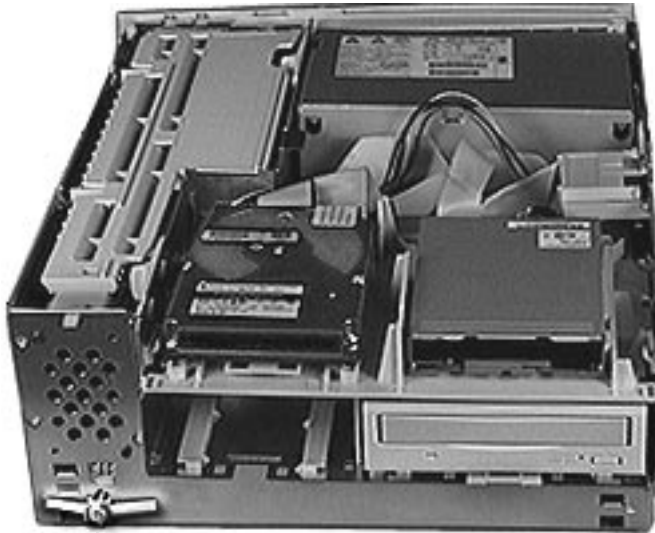




## Power Actuator

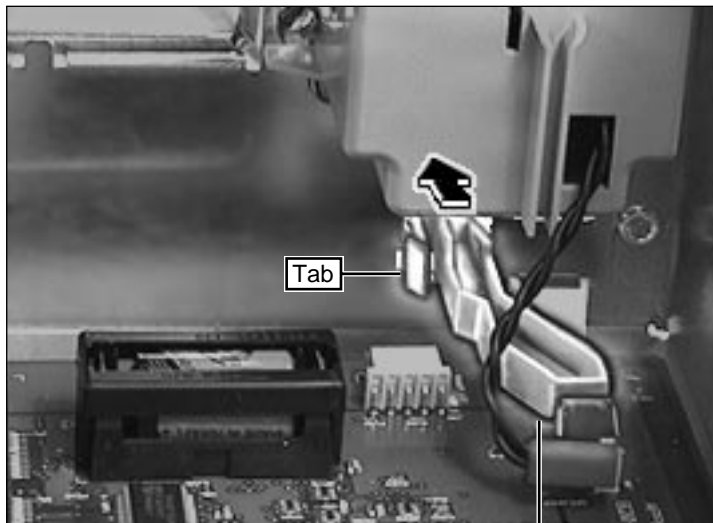
Before you begin, remove the top housing.

**Note:** As you face the computer, the power actuator is in the front left corner of the bottom chassis (directly beneath the speaker).



Power Actuator





- 1 Push in the tab that secures the power actuator to the chassis and push the power actuator out of the computer.



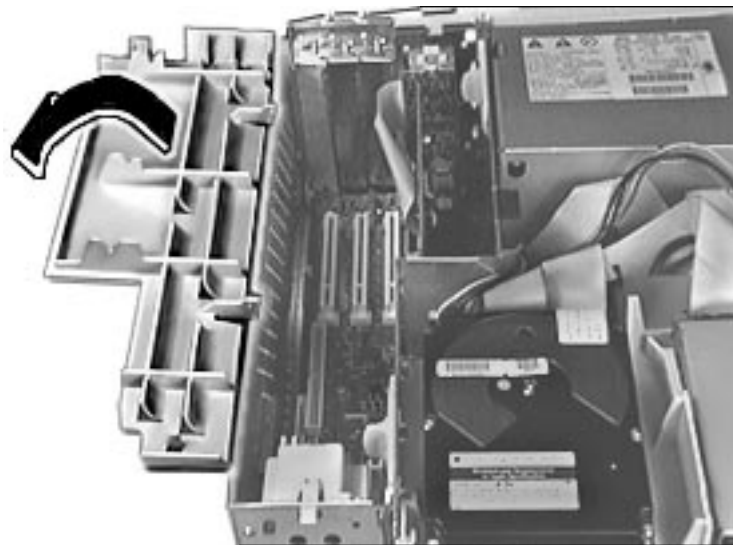


## PCI Cover

Before you begin, remove the top housing.

**Note:** As you face the back of the computer, the PCI covers are on the right side of the rear panel.

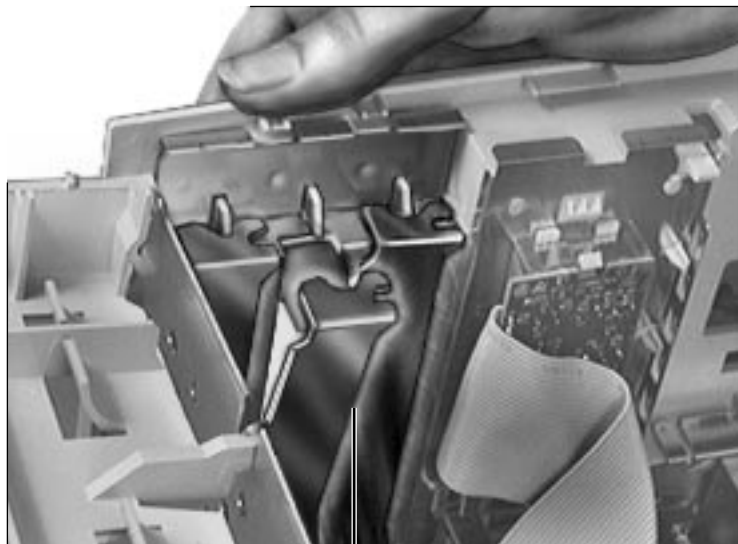




- 1 Swing open the expansion card cover.



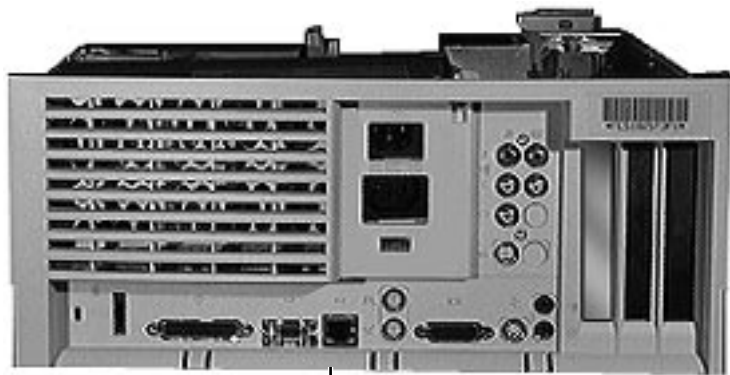




PCI Cover

- 2 From the back of the computer, press in and lift up on the PCI cover to remove it.





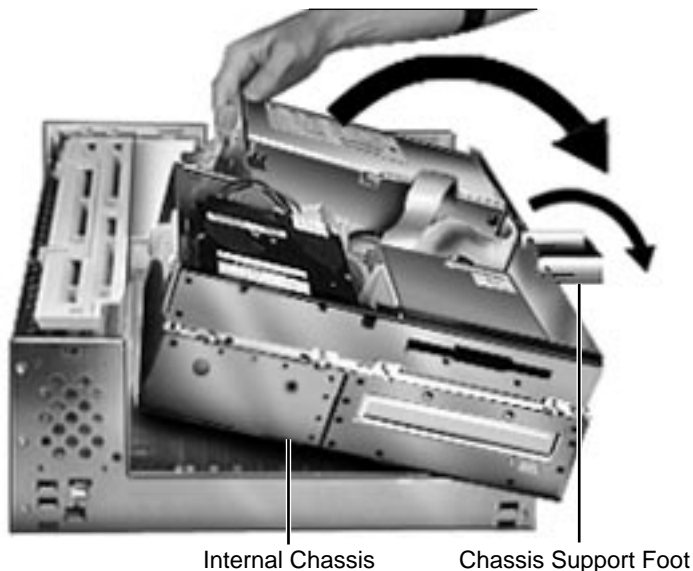
Rear Panel

## Rear Panel

Before you begin, remove the top housing.

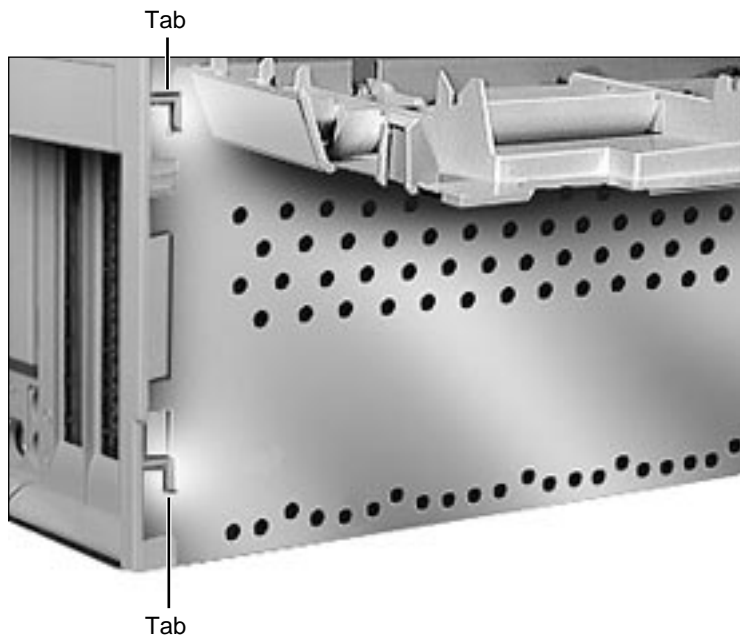
**Note:** The rear panel covers the back side of the computer through which all the external connectors are accessible.





- 1 First, release the chassis latches. Next, flip open the chassis support foot and then swing open the internal chassis that contains the power supply.





- 2 Lift the rear panel straight up to unhook it from the metal chassis. Once the rear panel is unhooked, you can remove it from the computer.

**Note:** There are tabs on the rear panel that hook into the metal chassis.





**Replacement Note:** To replace the rear panel, you must first follow the procedures for removing the logic board. Instead of fully removing the logic board from the chassis, however, just slide it forward about an inch. Once you have the rear panel in place, slide the logic board back toward the rear panel until the board locks into place. Be sure the logic board connectors are lined up properly with the openings in the rear panel.

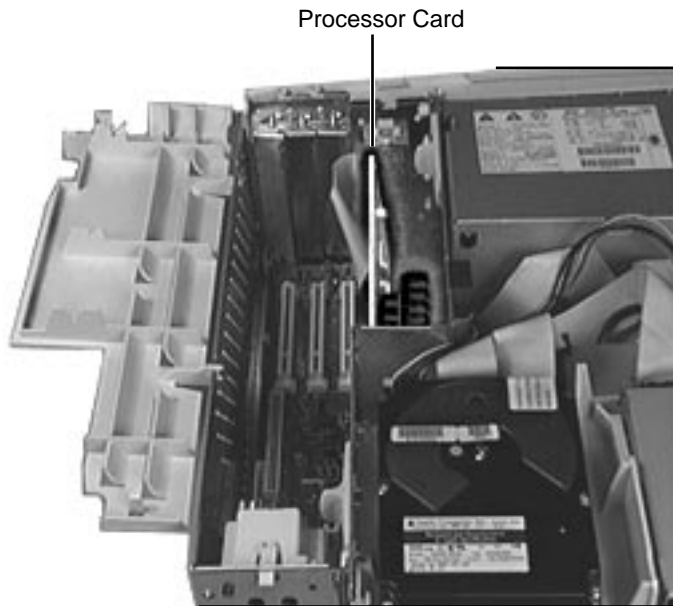


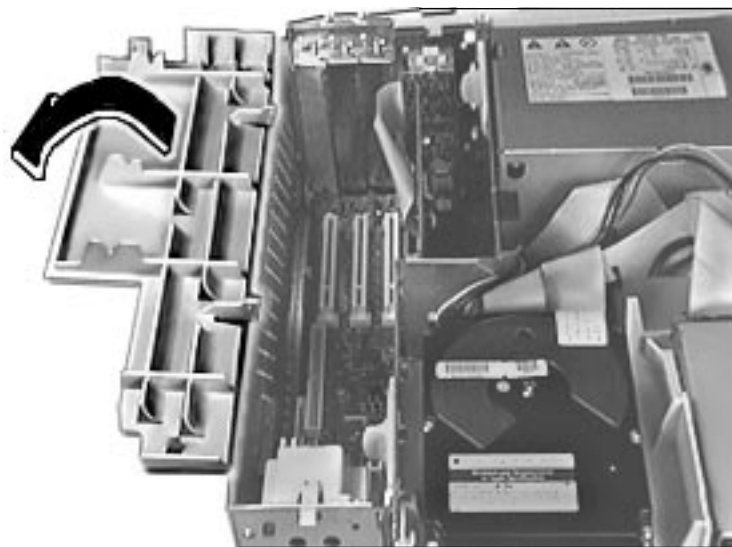


## Processor Card

Before you begin, remove the top housing.

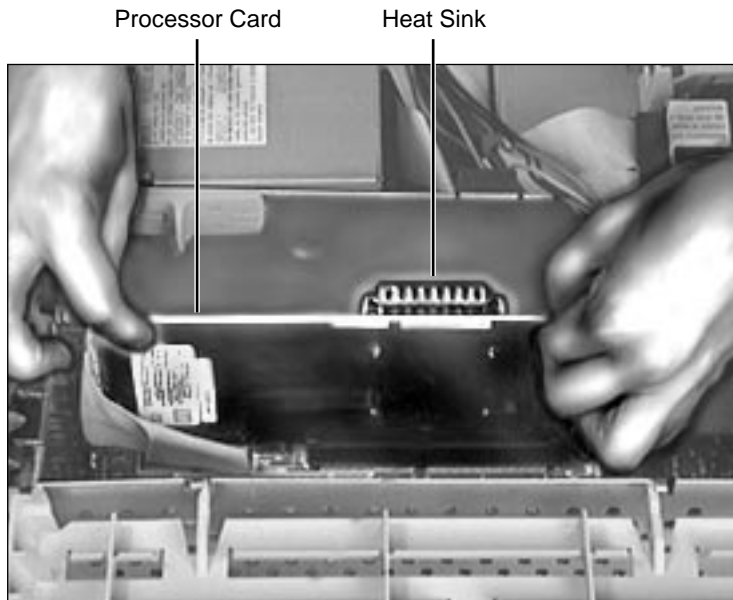
**Note:** The processor card installs perpendicularly to the logic board directly beneath the plastic PCI guide.





- 1 Swing open the expansion card cover.





**Warning:** The heat sink may be hot to the touch.

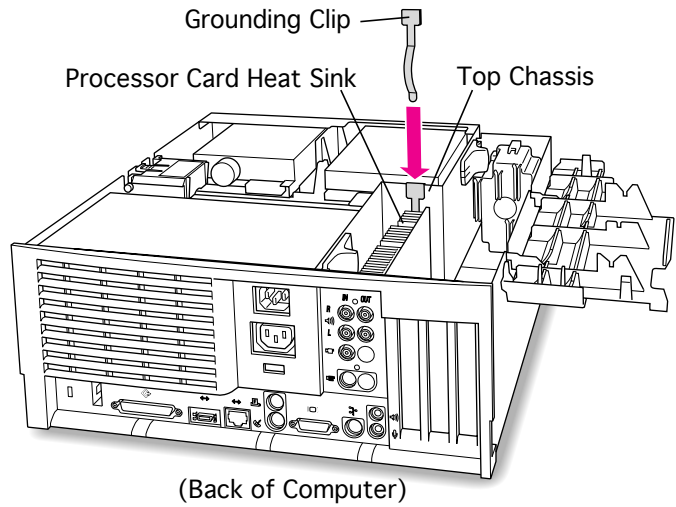
- 2 Grab the corners of the processor card and pull the card straight up to remove it.

**Replacement Note:** Position the card evenly over the processor card slot and press down gently. Do not force the card or you may damage it. Make sure the card is seated evenly.

If you are installing a 132 MHz card in the computer, you must install an EMI clip.



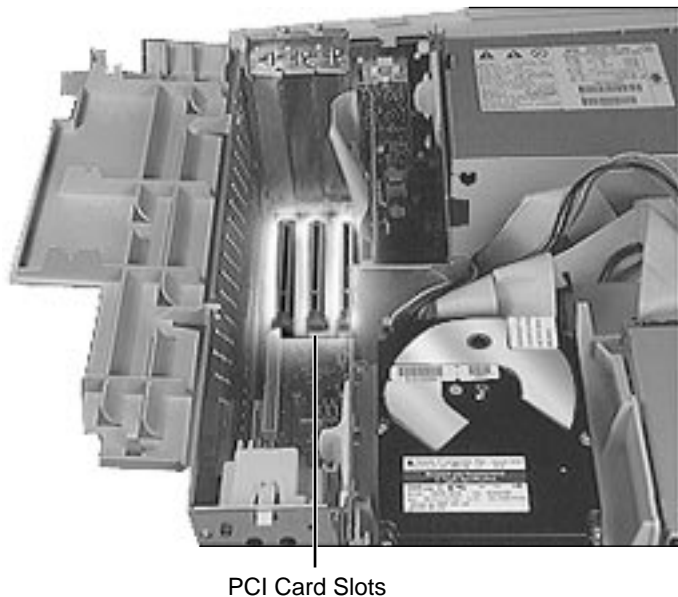




The EMI clip is provided in the 132 MHz Card Upgrade Kit.

- 3 Slide the grounding EMI clip over one wall of the top chassis. Make sure the grounding clip also touches the processor card heat sink.





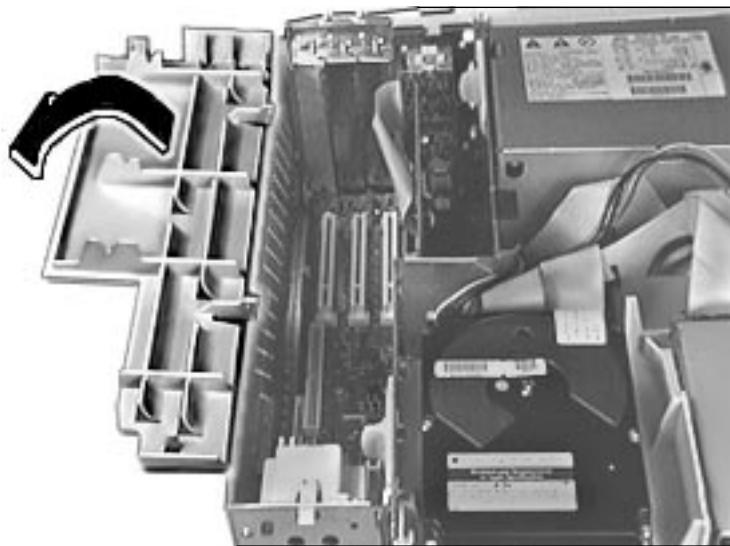
## PCI Cards

Before you begin, remove the top housing.

**Note:** PCI expansion cards, if present, install perpendicularly to the logic board in one of three PCI slots. They are located directly beneath the plastic PCI guide.

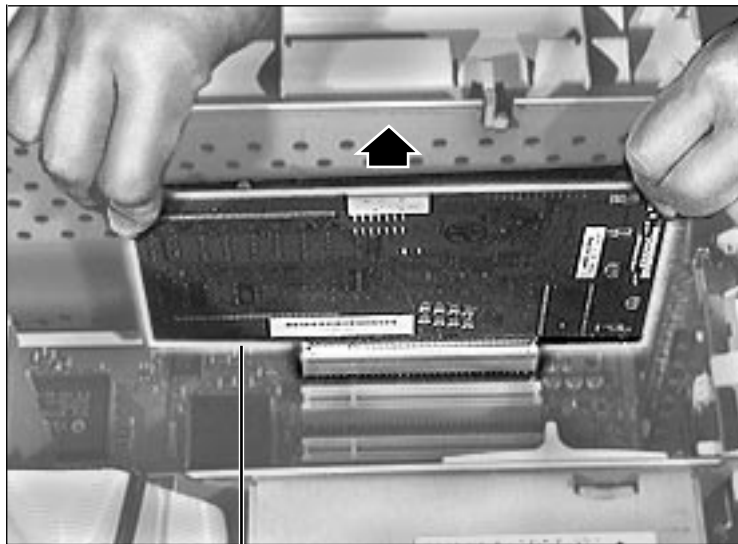
If installing third-party PCI cards, use the middle PCI slot for better clearance with the expansion card cover. If necessary, remove the expansion cover.





- 1 Swing open the expansion card cover to provide access to the logic board.





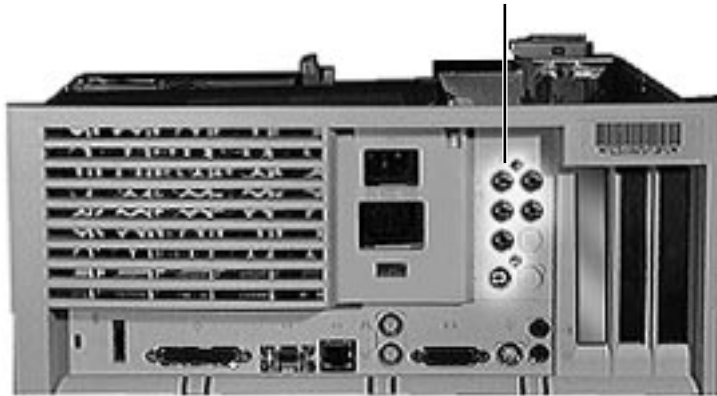
PCI Card

- 2 Grab the corners of the PCI card and pull up the card to remove it.





AV Module

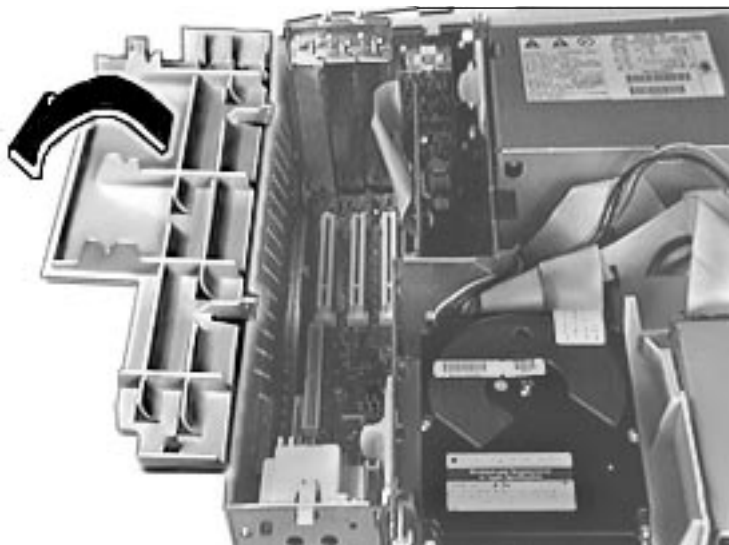


## AV Module

Before you begin, remove the top housing.

**Note:** The AV module is installed only in Power Macintosh 7500 and 7600 Series computers. The module attaches to the rear panel and plugs into the logic board. It's located next to the PCI slots.



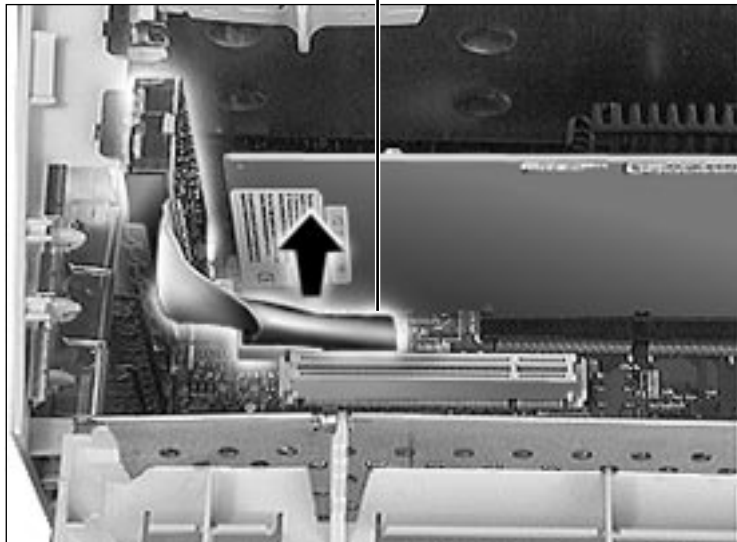


- 1 Swing open the expansion card cover to provide access to the AV module.



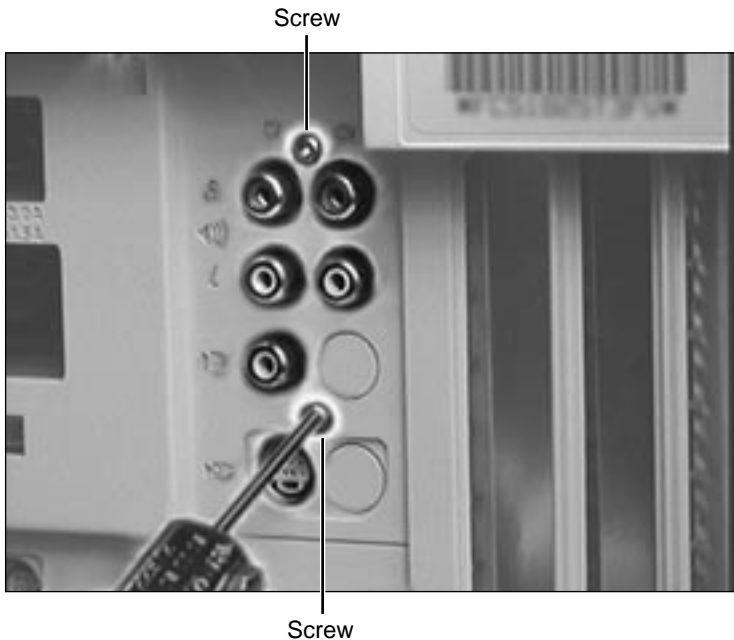


AV Module Cable



- 2 Disconnect the AV module cable from the logic board.

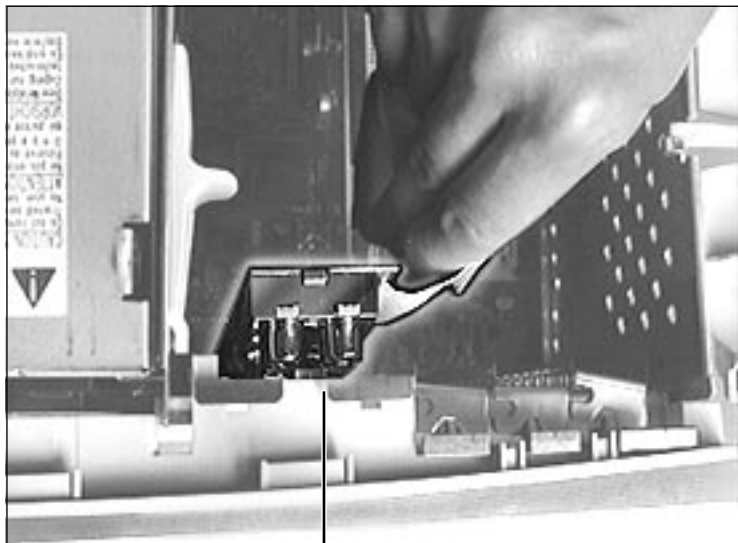




- 3 Remove the two Torx screws that secure the AV module to the rear panel.



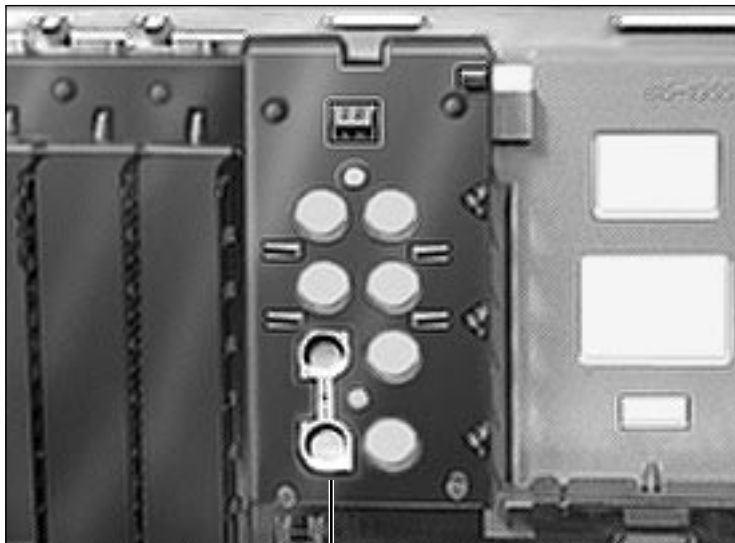




AV Module

- 4 Lift out the AV module to remove it from the computer.

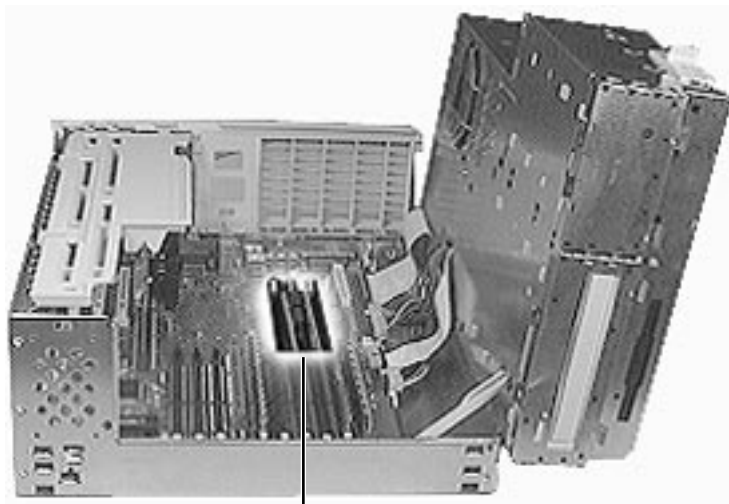




AV Connector Cover

- 5 Remove the AV connector cover from the rear panel.





VRAM DIMM Slots

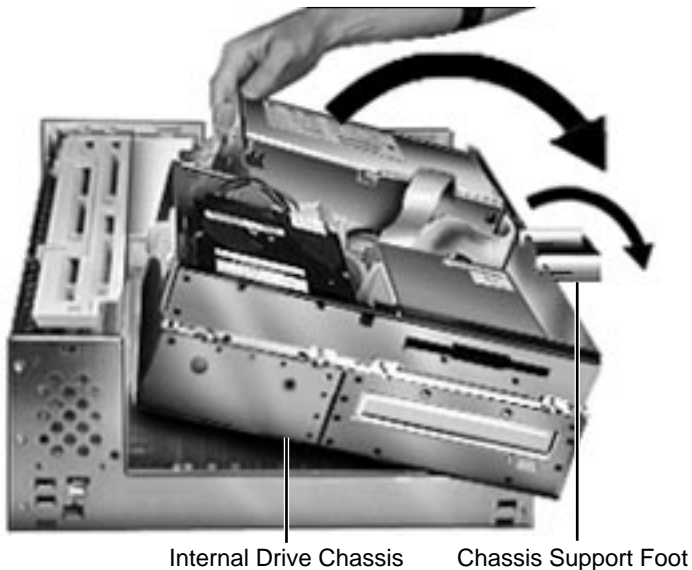
## VRAM DIMMs

Before you begin, remove the top housing.

**Note:** VRAM DIMMs install on the logic board in the VRAM DIMM slots.

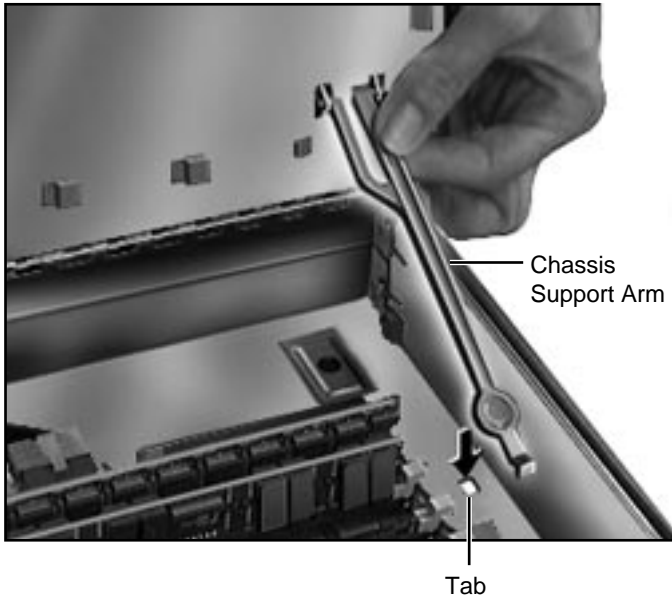
**Note:** The Power Macintosh 7300, 7500, and 7600 Series computers use VRAM DIMMs (112-pin, 70 ns or faster) instead of VRAM SIMMs. The VRAM SIMMs used in earlier Power Macintosh models are not compatible.





- 1 First, release the chassis latches. Next, flip open the chassis support foot and then swing open the internal chassis that contains the power supply.

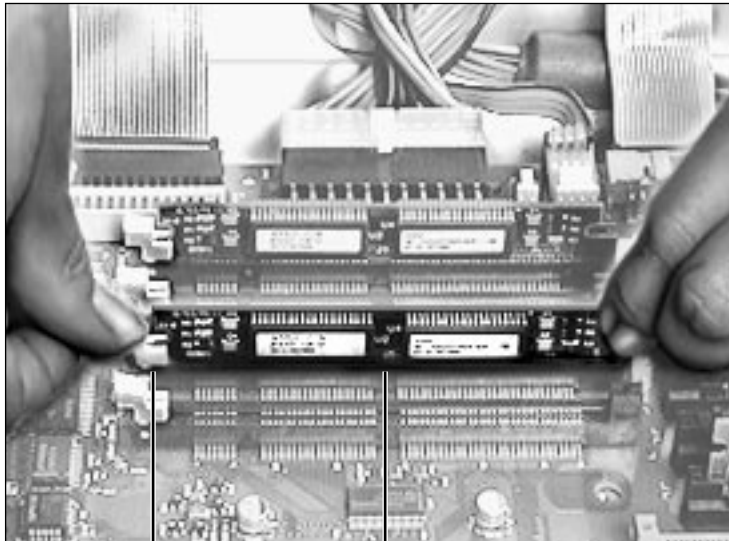




- 2 To secure the internal chassis in the up position, flip down the chassis support arm and make sure its bottom tab is securely fastened in the hole provided in the bottom chassis.

**Warning:** To be safe, never work on the computer with the internal chassis in the up position unless the chassis support arm is down and securely fastened.





Release Latch

VRAM DIMM

- 3 Push down the release latch next to the VRAM DIMM. Grab the DIMM by the top corners and lift straight up to remove the DIMM from the logic board.

**Note:** See the following pages for important replacement information.



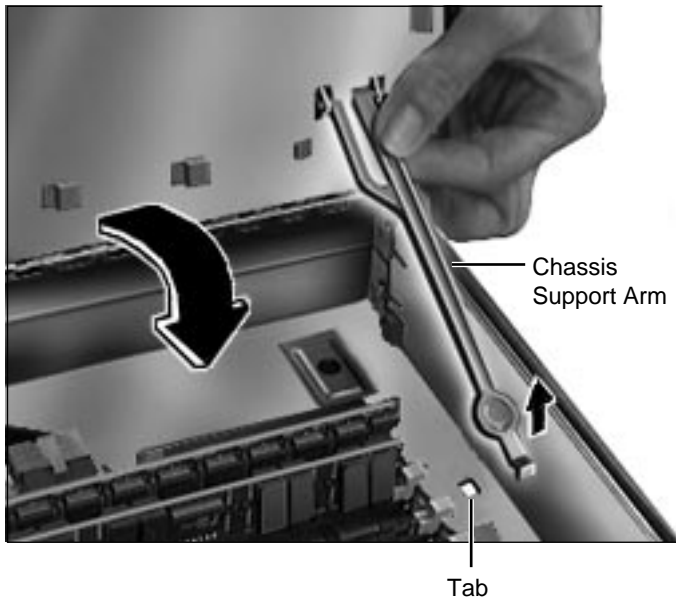


**Replacement Note:** Position the DIMM evenly over the slot and press down gently to install it. The release latch should click into place. Be careful not to force the VRAM DIMM or you may damage it. Make sure the DIMM is evenly seated.

**Note:** This computer uses VRAM DIMMs (112-pin, 70 ns or faster) instead of VRAM SIMMs. The VRAM SIMMs used in earlier Power Macintosh models are not compatible.

**Note:** The Power Macintosh 7300, 7500, and 7600 Series computers come with two 1 MB VRAM DIMMs installed. To upgrade the unit to 4 MB, you must install two 1 MB VRAM DIMMs in the remaining VRAM slots. VRAM DIMMs must be installed in matching pairs and in paired slots in the computer.

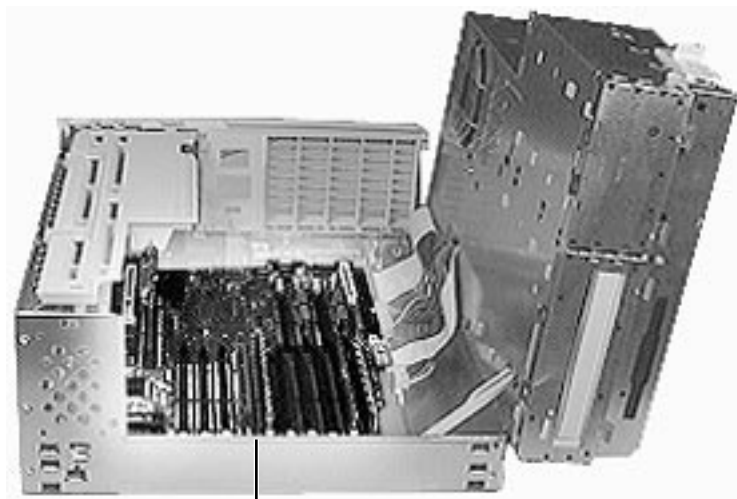




- 4 Be sure to release the chassis support arm before you swing down the internal chassis.







Logic Board

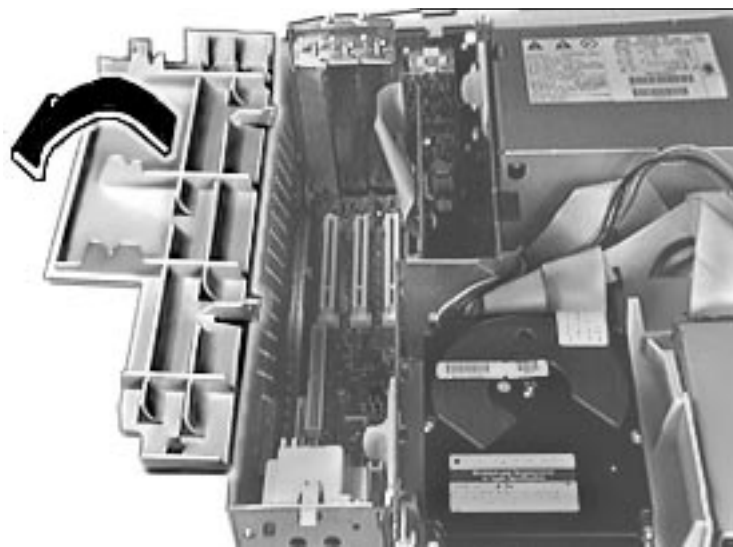
## Logic Board

Before you begin, remove the following:

- Top Housing
- Processor Card
- PCI Cards (if present)
- Speaker
- Power Actuator

**Note:** The logic board is located in the very bottom of the bottom chassis.



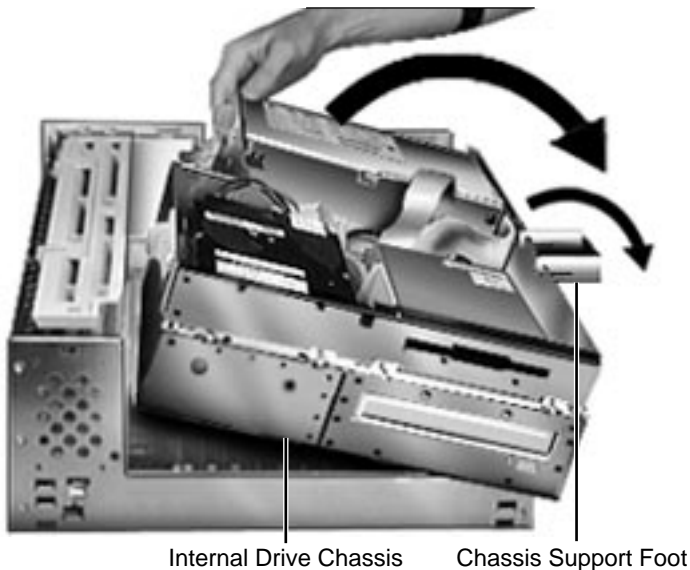


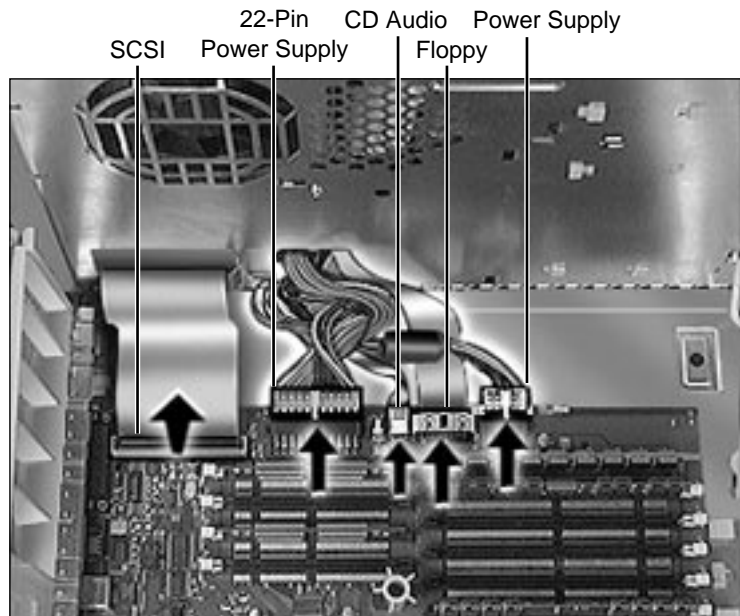
- 1 Swing open the expansion card cover to provide access to the logic board.





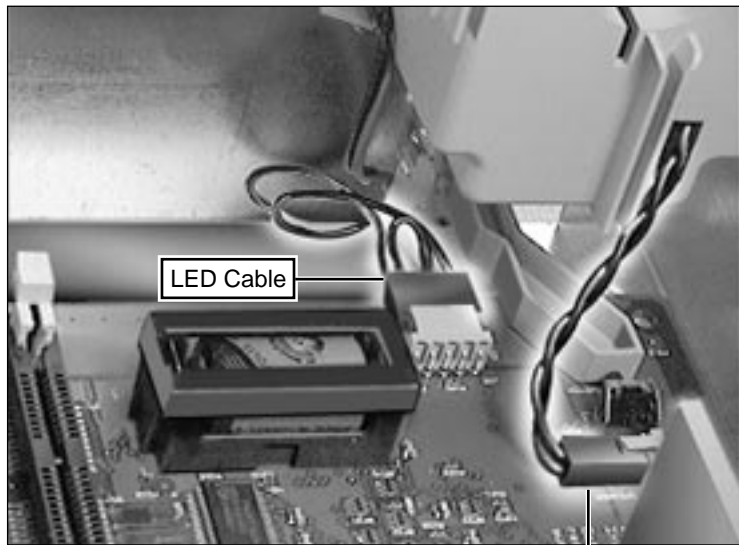
- 2 First, release the chassis latches. Next, flip open the chassis support foot and then swing open the internal chassis that contains the power supply.





- 3 Disconnect the following cables from the logic board: both power supply cables, floppy drive cable, SCSI cable, and CD audio cable.





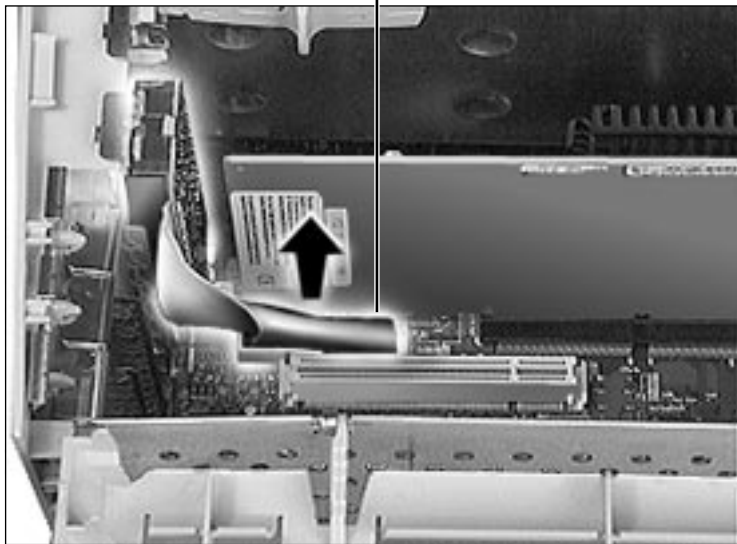
- 4 Disconnect the LED and speaker cables from the logic board.

Speaker Cable



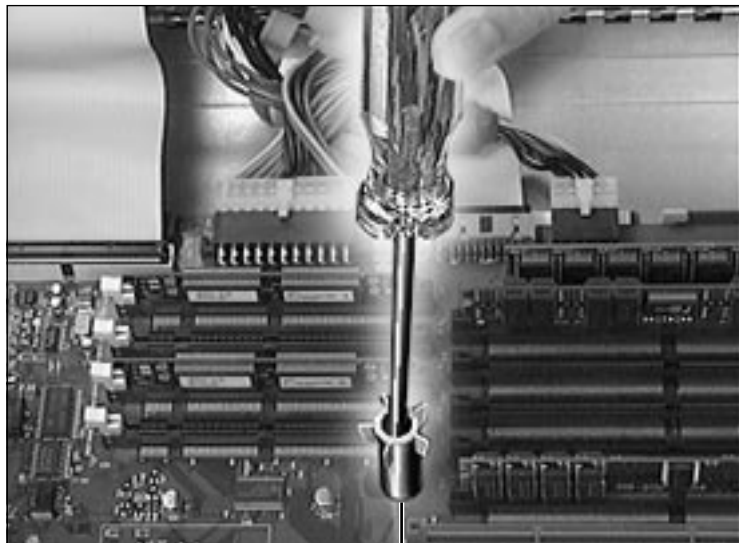


AV Module Cable



- 5 Disconnect the AV module cable from the logic board.

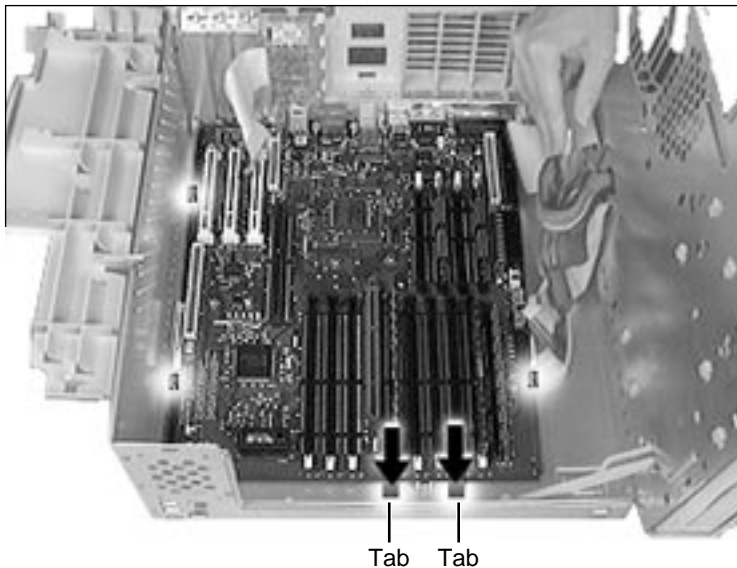




Top Column Support

- 6 Remove the screw inside the top column support that secures the logic board to the chassis.



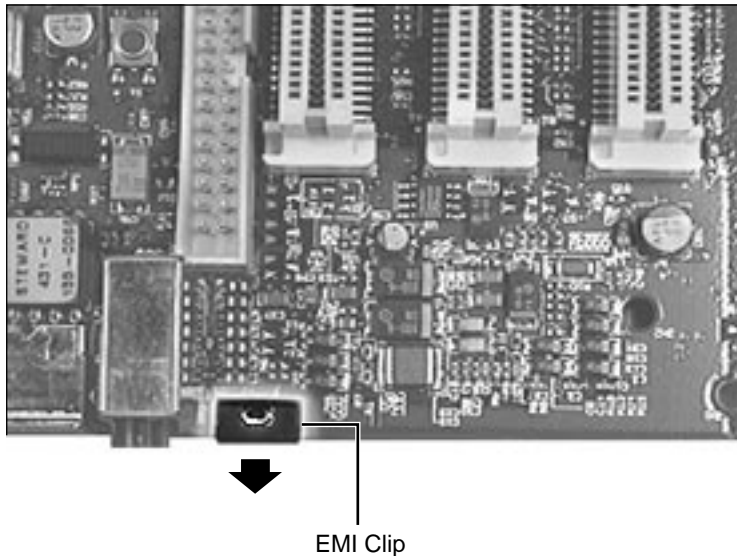


- 7 Press down on the two tabs at the front of the logic board and slide the logic forward (away from the rear panel) to release it from the tabs on the bottom chassis. Lift the logic board from the chassis to remove it.

**IMPORTANT:** Remove the EMI clip when you take the logic board out of the chassis. Failure to comply may result in damage to the board. (See the next page for instructions).



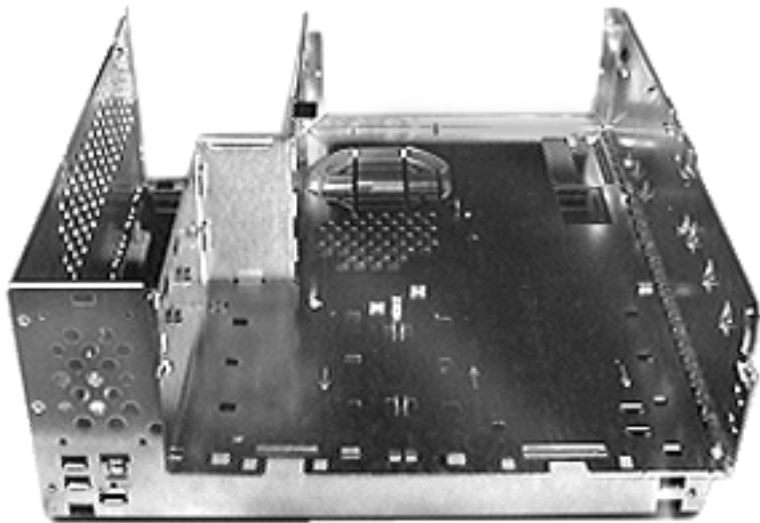




- 8 Lift up the top edge of the EMI clip and pull it off the board to remove it.

**Note:** Remove the EMI clip and any cache, DRAM, or VRAM DIMM(s) before returning the logic board to Apple. Do NOT remove the ROM SIMM (if present).



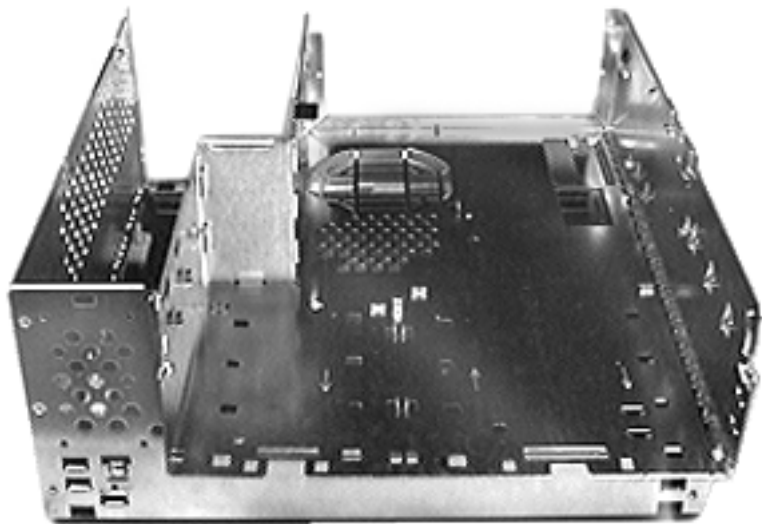


## Bottom Chassis

Before you begin, remove the following:

- Top Housing
- Processor Card
- PCI Cards (if present)
- AV Module (if present)
- Speaker
- Power Supply
- Power Actuator
- All Drives
- Chassis Latches
- Drive Rails
- Logic Board
- Rear Panel





**Note:** The bottom chassis is what is left once all other modules have been removed.





## Security Bar

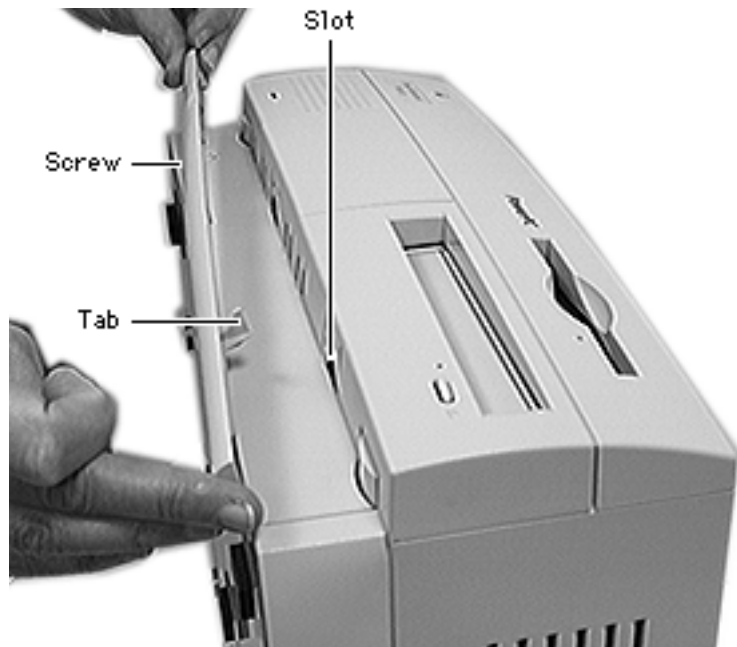
No preliminary steps are required before you begin this procedure.

**Note:** The security bar is a feature on the Power Macintosh 7300 Series computers and the Power Macintosh 7600/200.



Security Bar





- 1 Remove the security bar mounting screw.
- 2 Rotate the bar up to release the tab from the slot on the front of the computer and remove the bar.





## Upgrades

---

Power Macintosh 7300, 7500, and  
7600 Series

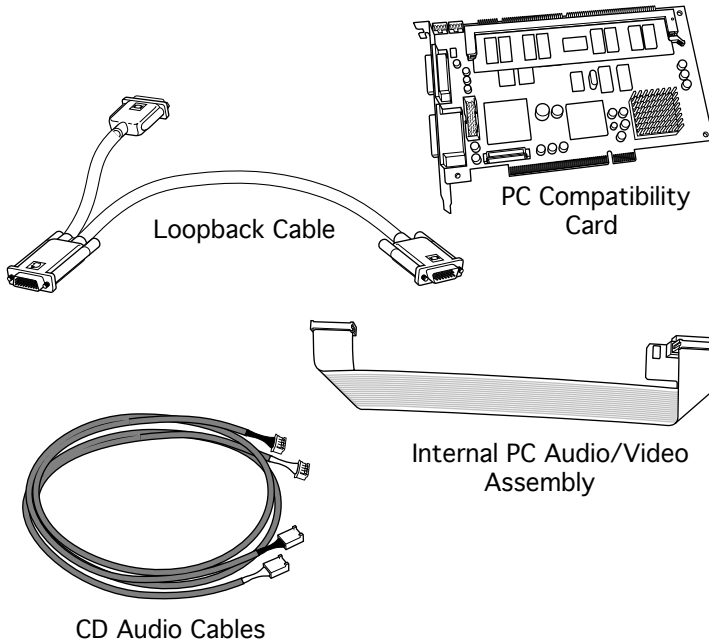


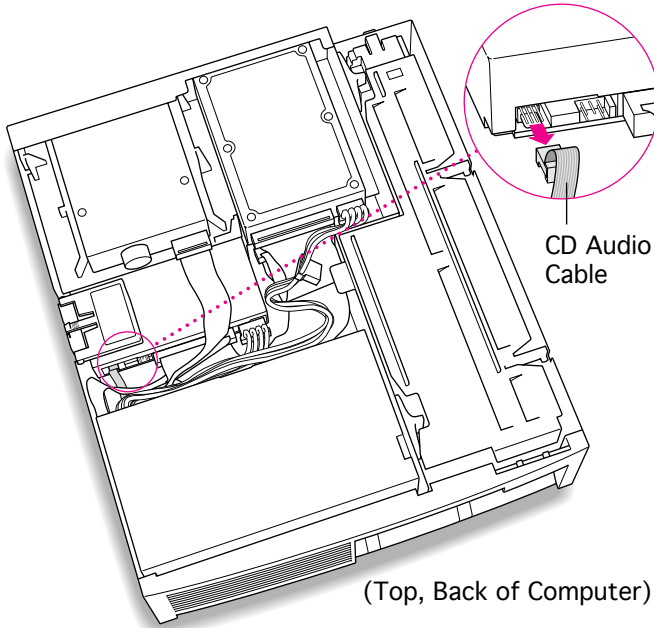


## 7" PC CARD

The 7" PC Compatibility Card Upgrade kit includes the PC Compatibility card, a loopback cable, a PC audio/video cable (not used with the Power Macintosh 7300, 7500, or 7600), and two CD audio cables.

**Note:** A previous product, the DOS Compatibility Card, came with a different loopback cable that has four connectors. That cable does not work with the PC Compatibility Card.





Before you begin, remove the top housing.

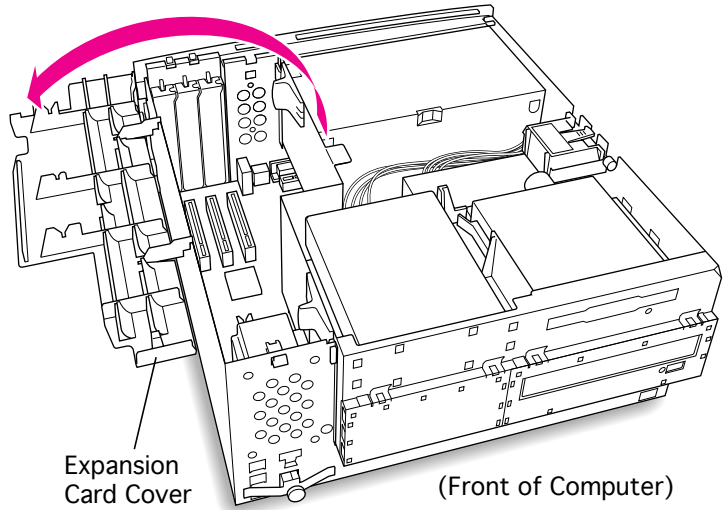
- 1 Disconnect the CD audio cable from the CD-ROM drive.

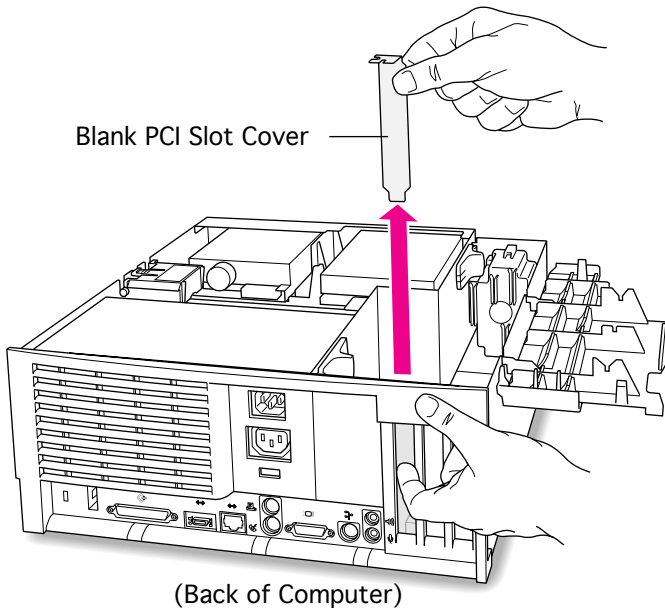






- 2 Flip open the expansion card cover.





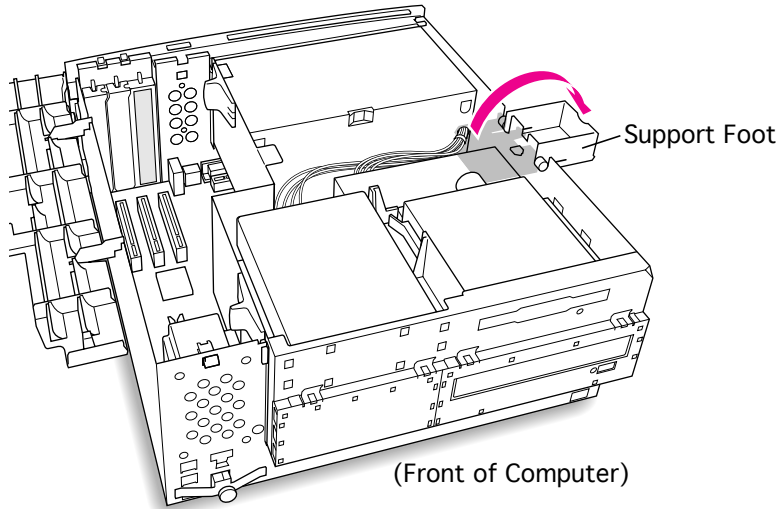
- 3 Remove the first blank PCI slot cover.

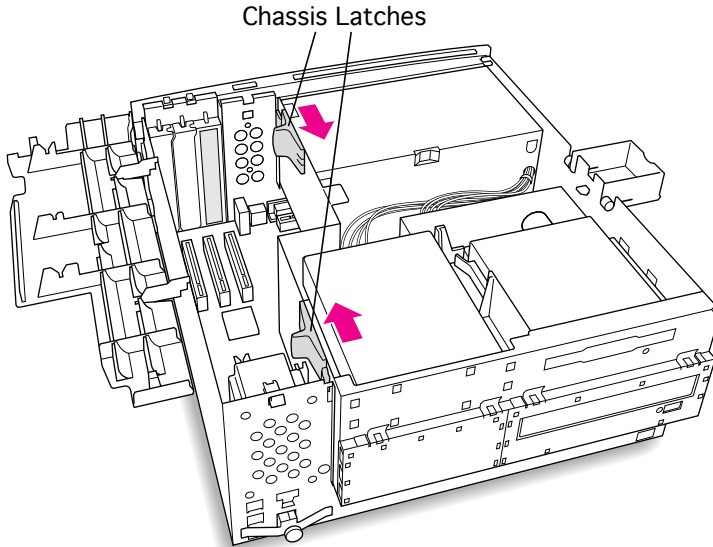
**Note:** It is recommended that you install the PC Compatibility Card in the first slot (the one closest to the center of the computer). But if that slot is already taken, you can install the PC Compatibility Card in another slot.





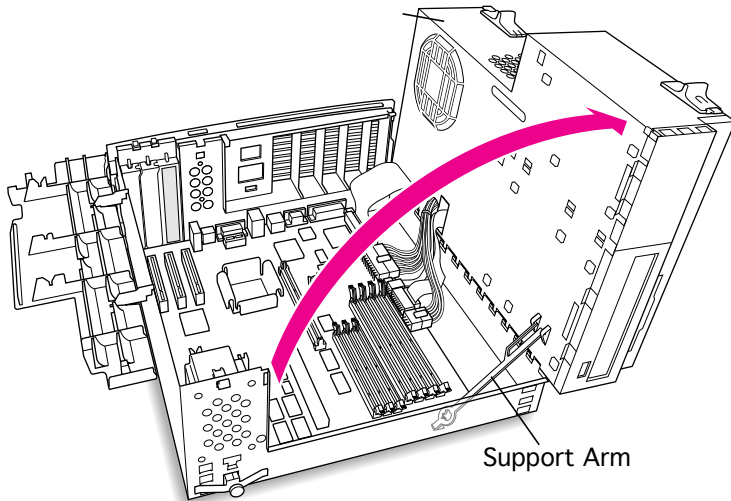
- 4 Flip open the chassis support foot.





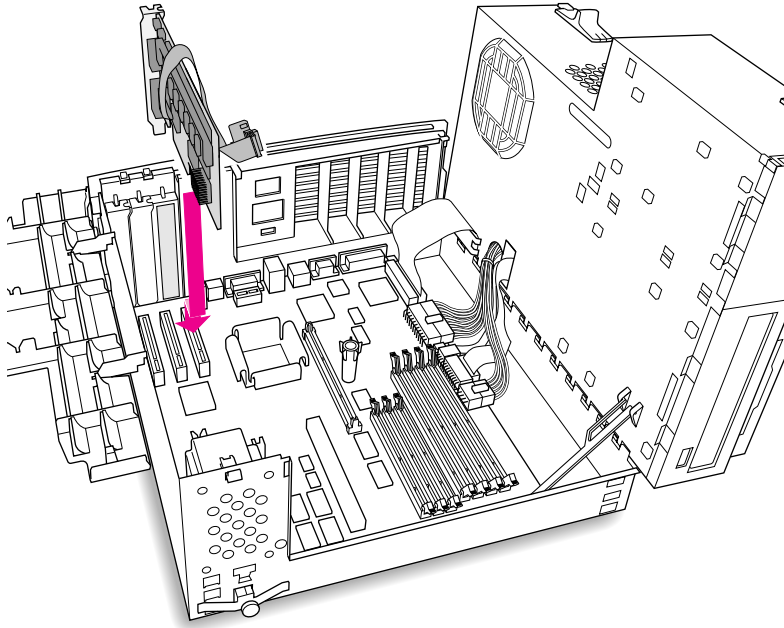
- 5 Release the chassis latches.





- 6 Swing open the chassis to provide access to the logic board.
- 7 Flip down the chassis support arm. Be sure the support arm engages the hole in the bottom chassis so that the arm locks into place.





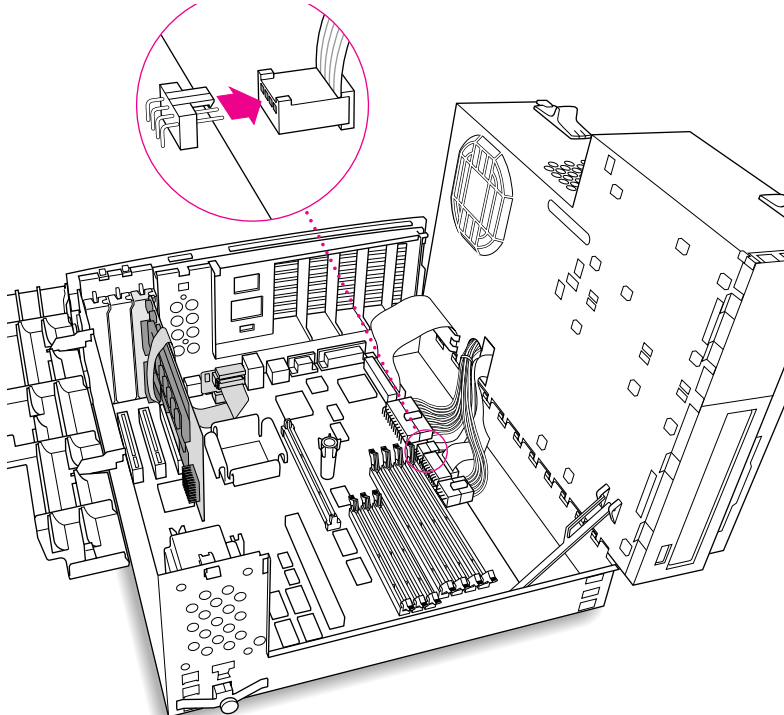
- 8 Insert the card into the slot whose blank PCI slot cover you removed earlier. Press down firmly on the card until the connector is fully inserted. Don't force the card. If you meet a lot of resistance, pull the card out and try again.

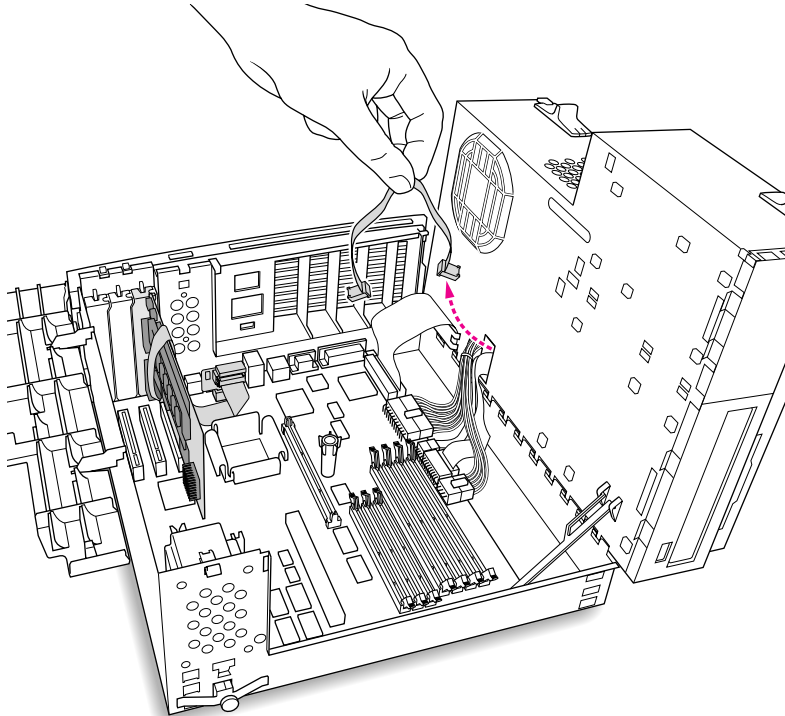
**Note:** The card can be installed in any available PCI slot in the computer, however, the first slot is preferred.





- 9 Disconnect the CD audio cable from the Sound In connector on the logic board.

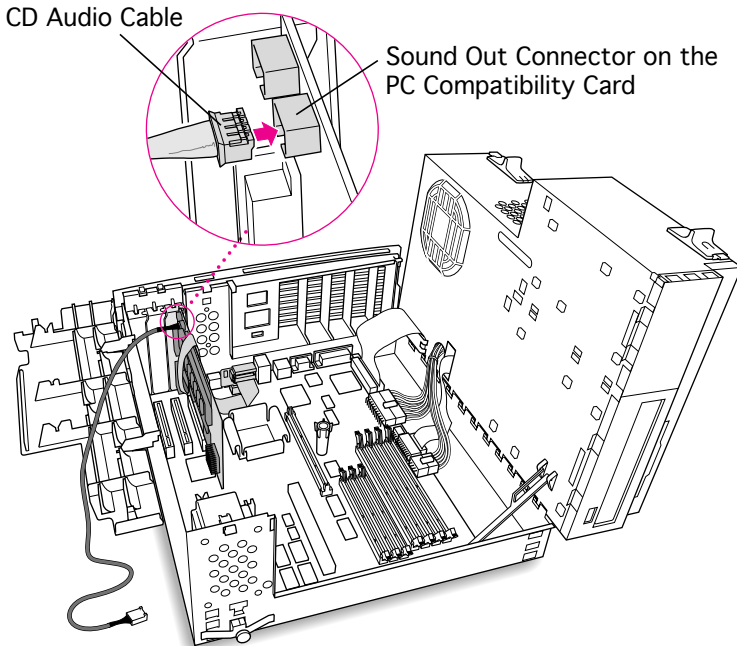




- 10 Pull the cable through the hole in the chassis and set it aside.





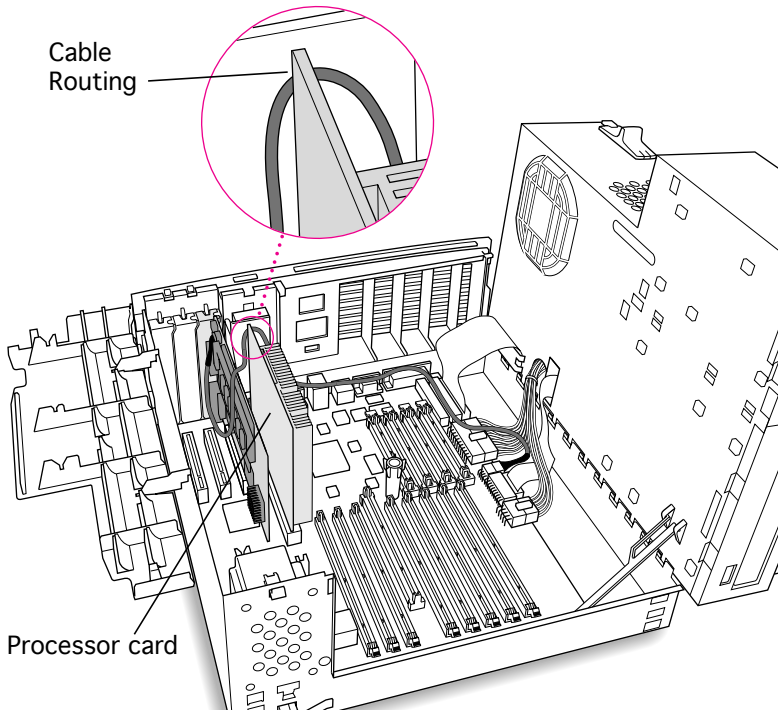


- 11 Plug one of the CD audio cables that came with the PC Compatibility Card into the Sound Out connector on the PC Compatibility Card.

**Note:** The Sound Out connector is next to the CD In connector, which is at the upper-left corner of the card.

**Note:** Two CD audio cables are included in the upgrade kit. They are different colors, but both work the same way.

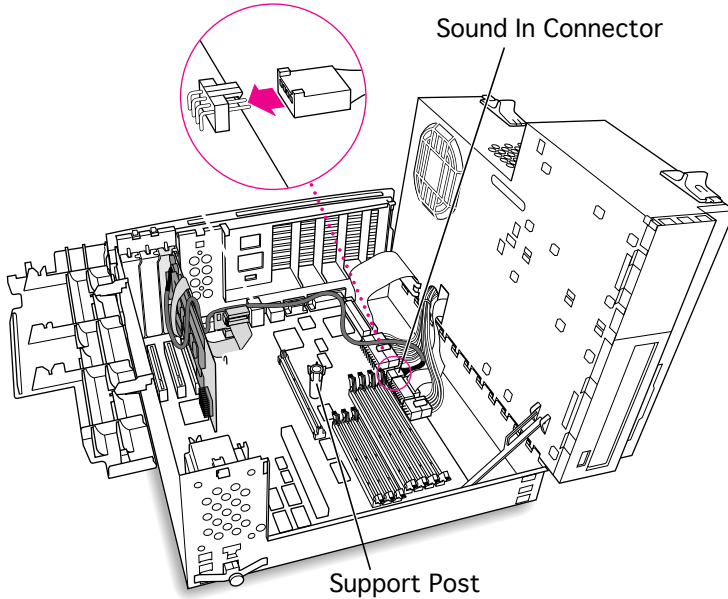




12 Route the cable over the top of the PC Compatibility card and along the back edge of the computer's logic board. Be sure to route the cable between the processor card and the back panel (not over the top of the processor card.)

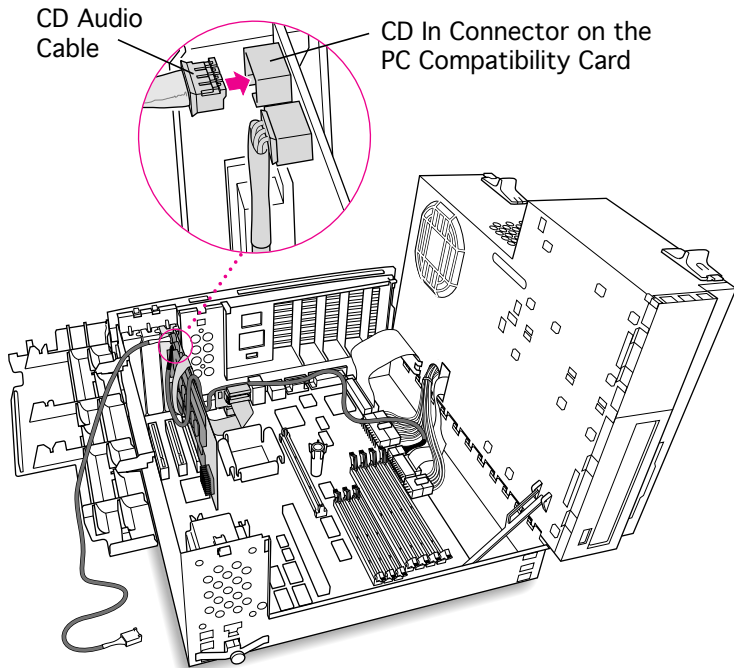
**Note:** Keep the cable away from the center support post.





- 13 Plug the cable into the Sound In connector on the computer's logic board.





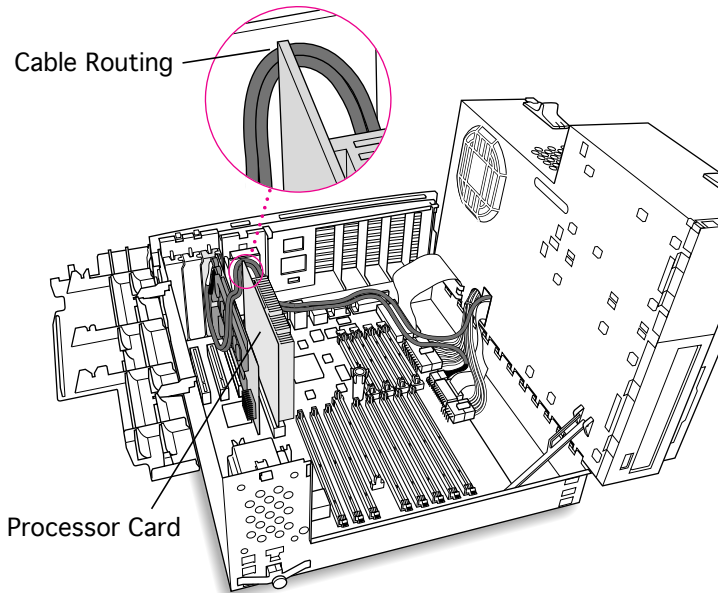
14 Connect the second CD audio cable to the CD In connector on the PC Compatibility card.

**Note:** The CD In connector is in the upper-left corner of the card.





- 15 Route the second cable over the top of the PC Compatibility card and between the processor card and the back panel (not over the top of the processor card). Run the cable along the back edge of the logic board.

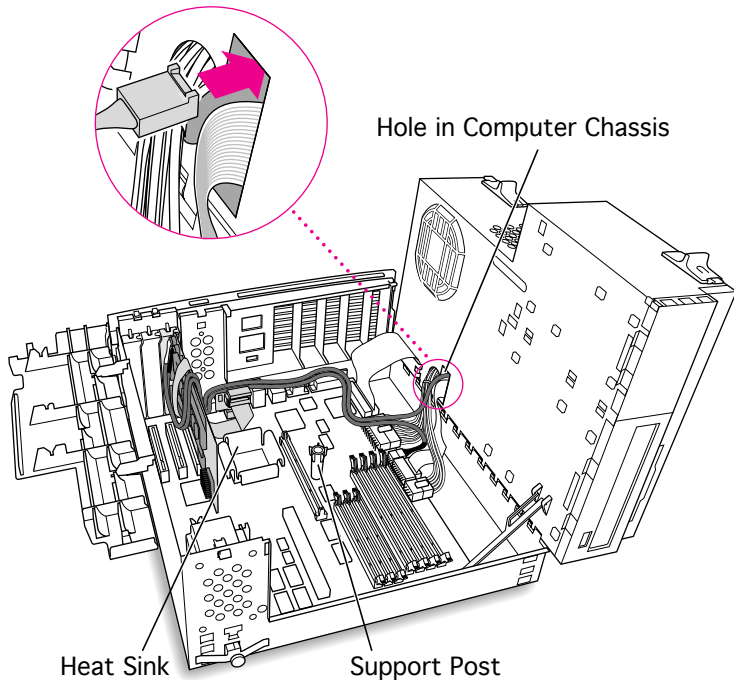


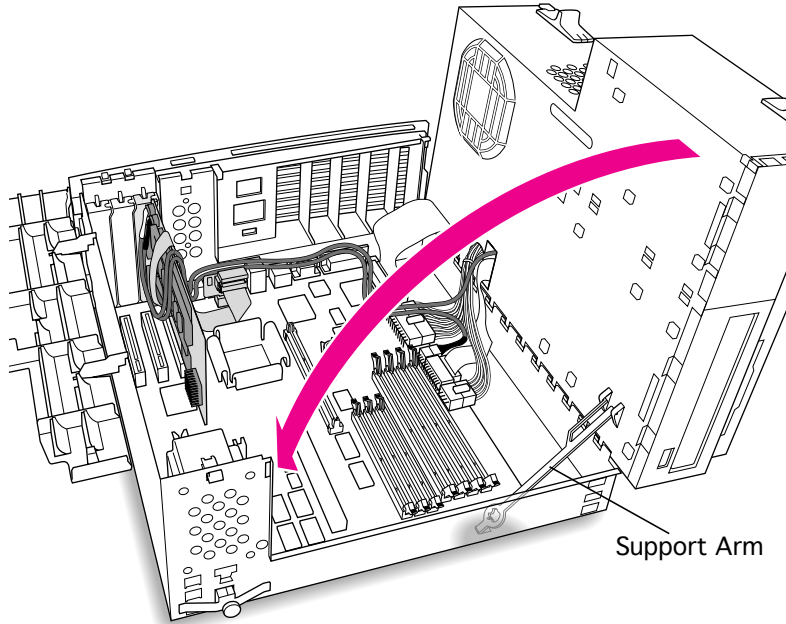
**Note:** Keep the cable away from the center support post.





16 Route the second cable through the hole in the computer chassis.





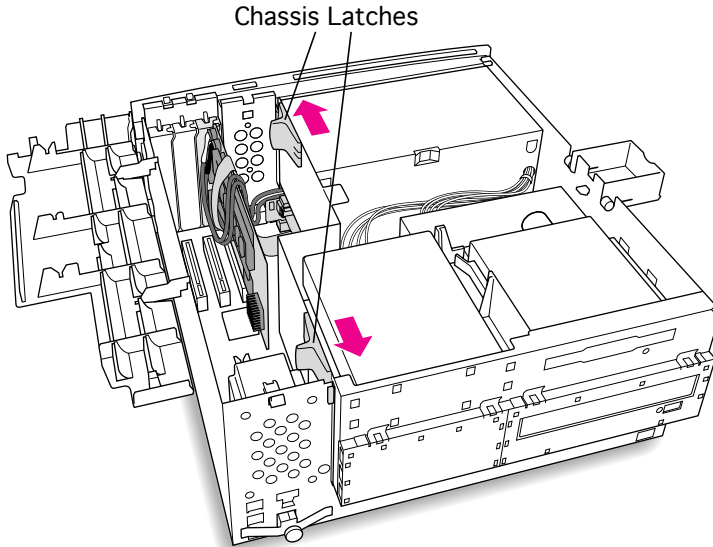
17 Disengage the support arm from the hole in the chassis bottom, and close the computer's upper chassis.

**Note:** Make sure you don't pinch any of the cables between the upper chassis and bottom chassis.





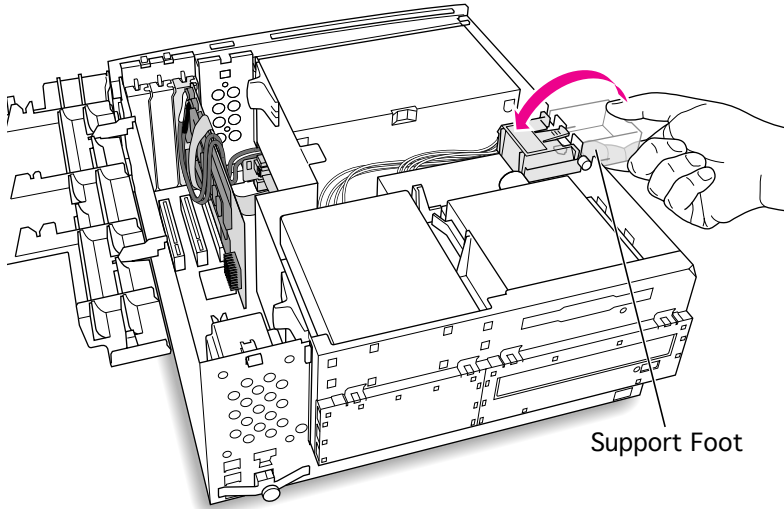
18 Lock the chassis latches.





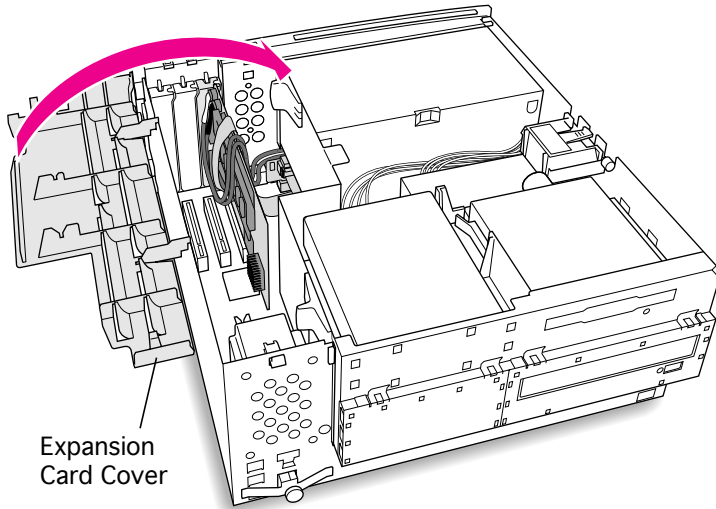


19 Replace the support foot.



Support Foot

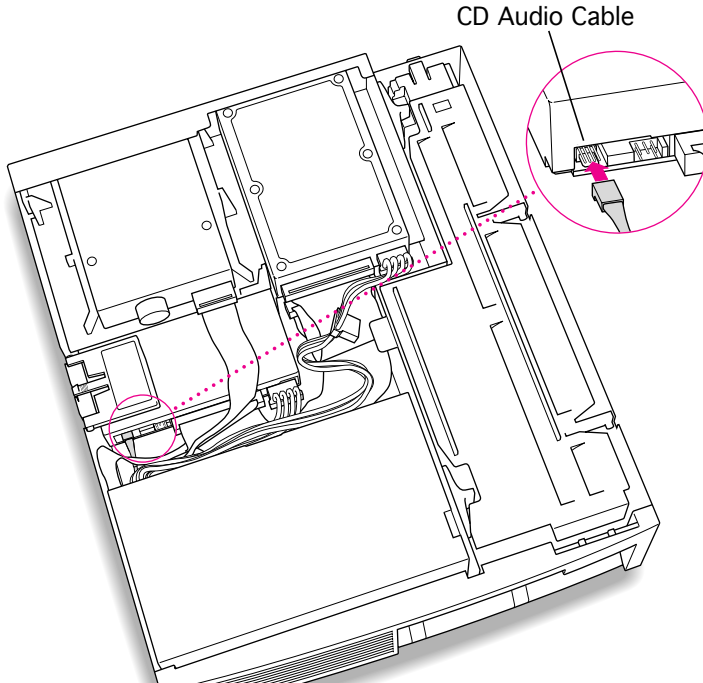




20 Flip the expansion card cover up and snap it back into place. (Be sure to snap the cover back down on both ends.)

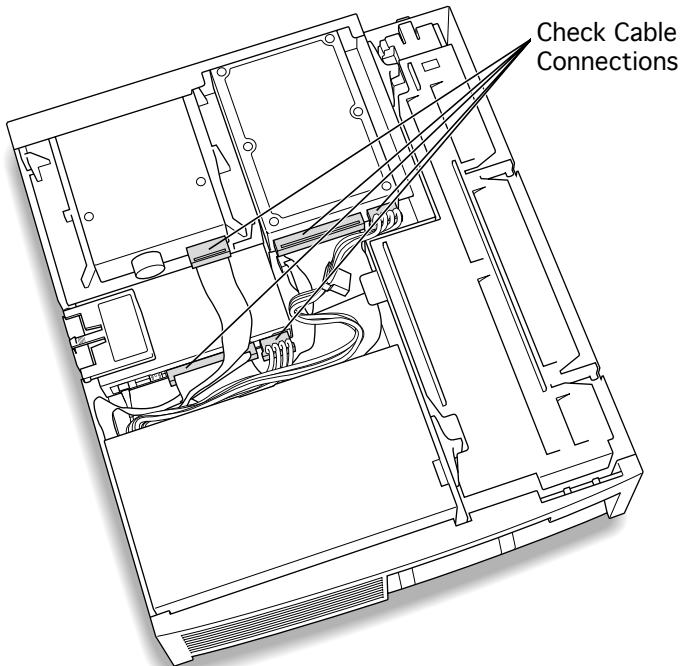
**Note:** If the cover doesn't snap into place easily, make sure no cables are in the way.





- 21 Connect the CD-ROM cable you threaded through the computer's chassis earlier to the Audio connector on the CD-ROM drive.





- 22 Make sure all cables and cards are firmly connected.
- 23 Replace the top housing. (Refer to the Take Apart chapter for instructions.)



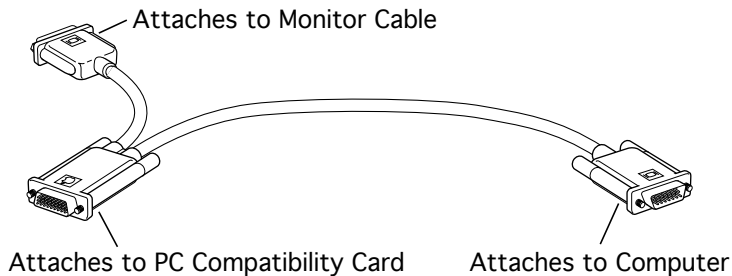


## Connecting Monitors

After you have installed the 7" PC Compatibility Card, connect the monitor(s) as follows to display both PC and Macintosh environments.

**▲Warning:** Do **not** plug a monitor into the joystick port that comes on some models of the PC Compatibility card, and do **not** plug a joystick into a monitor port. Serious damage can result to the equipment.

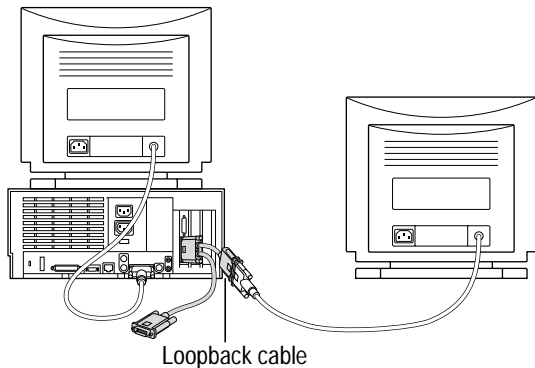




### **To connect a single monitor to the computer:**

- 1 Attach the short connector on the loopback cable to the monitor cable.
- 2 Attach the middle connector on the loopback cable to the PC Compatibility card.
- 3 Connect the long connector on the loopback cable to the computer's monitor port or video card.

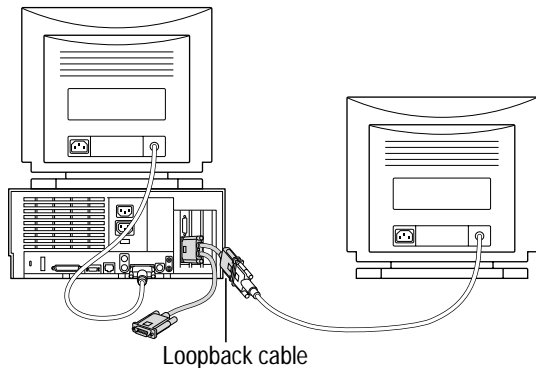




### **To connect two monitors to the computer:**

- 1 Connect the monitor you want to use for the Mac OS environment to the video port on the computer (or to the port on the computer's video card).
- 2 Attach the middle connector on the loopback cable to the PC Compatibility card.
- 3 Attach the short connector on the loopback cable to the second monitor cable.





- 4 In most cases, leave the long connector on the loopback cable unplugged. But if the computer has an additional video port, you can plug the long connector into this additional port. Doing so will allow you to switch the monitor between the PC and Mac OS environments.



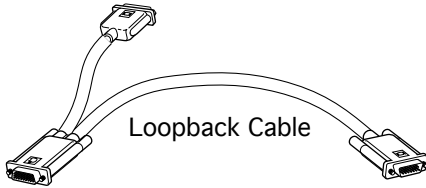




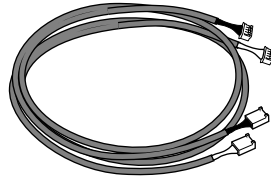
## 12" PC CARD

The 12" PC Compatibility Card Upgrade kit includes the PC compatibility card, a loopback cable, a PC audio/video cable (not used with the Power Macintosh 7300, 7500, or 7600), and the necessary CD audio cables.

**Note:** A previous product, the DOS Compatibility Card, came with a different loopback cable that has four connectors. That cable does not work with the PC Compatibility Card.



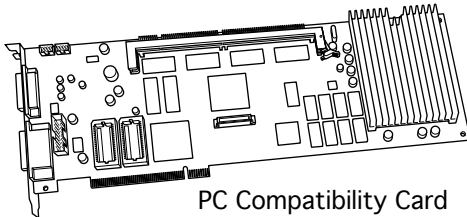
Loopback Cable



CD Audio Cables



Internal PC  
Audio/Video  
Assembly



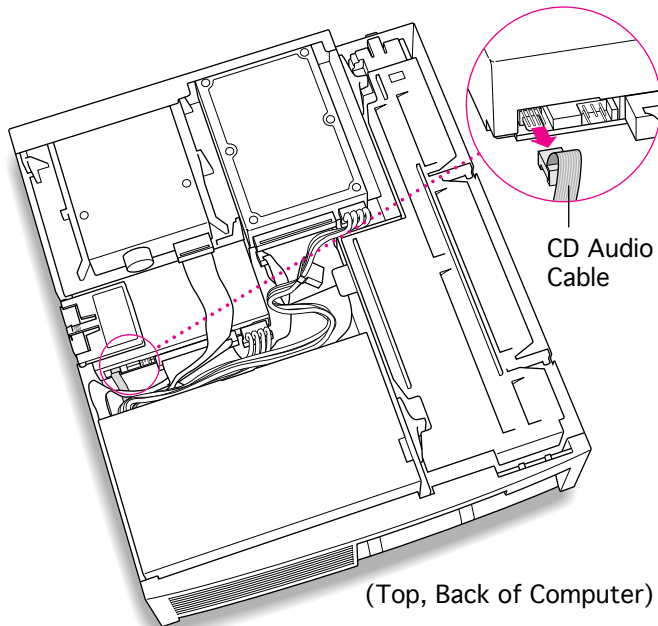
PC Compatibility Card





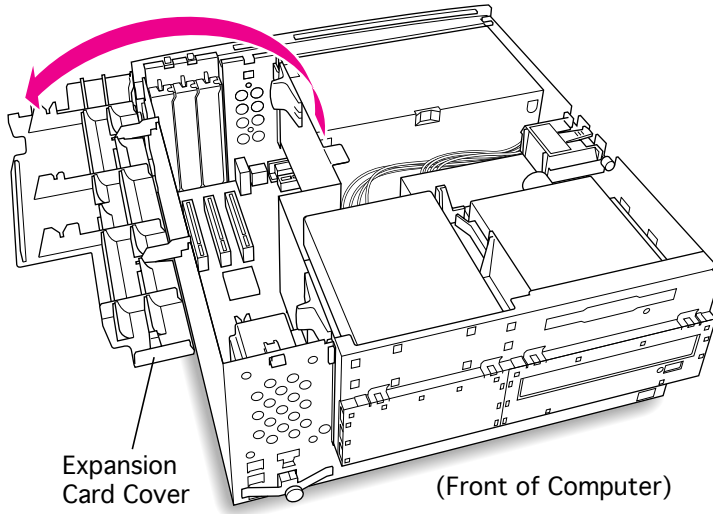
Before you begin, remove the top housing.

- 1 Disconnect the CD audio cable from the CD-ROM drive.



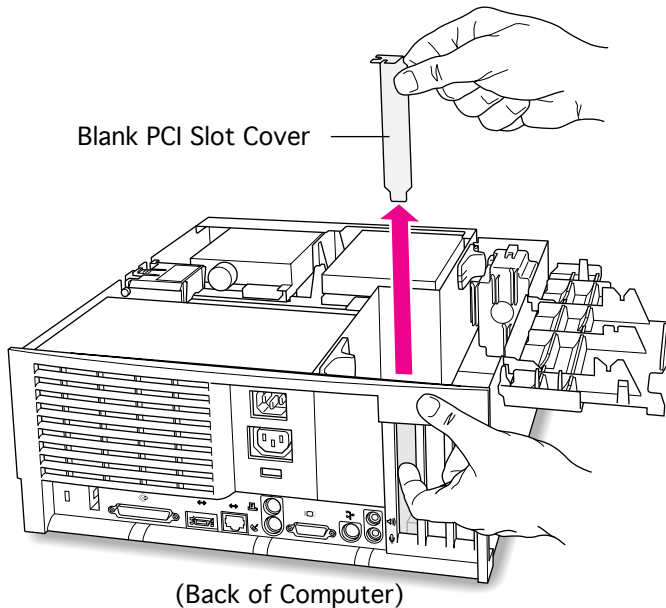
(Top, Back of Computer)





- 2 Flip open the expansion card cover.





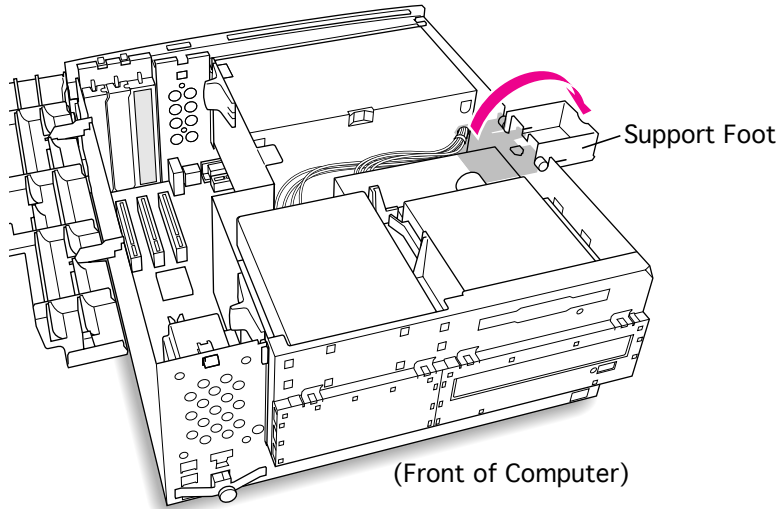
- 3 Remove the first blank PCI slot cover.

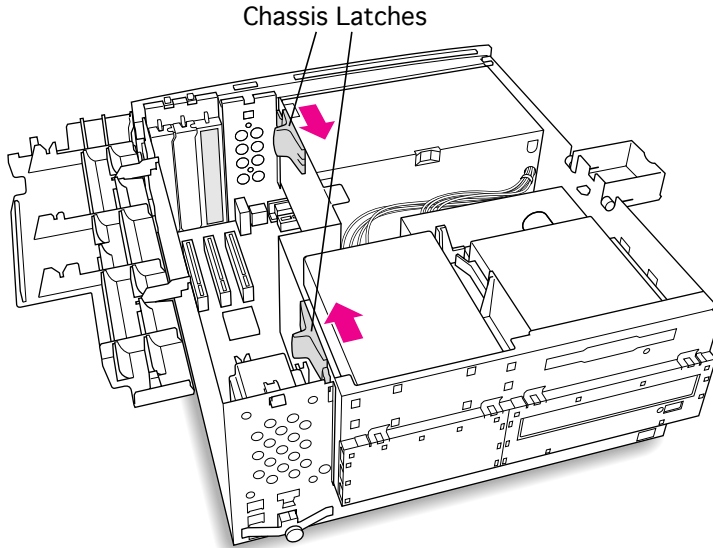
**Note:** It is recommended that you install the PC Compatibility Card in the first slot (the one closest to the center of the computer). But if that slot is already taken, you can install the PC Compatibility Card in another slot.





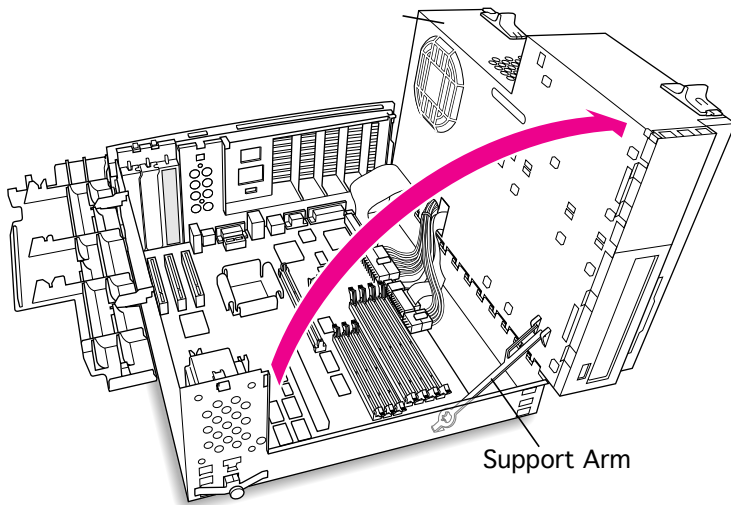
- 4 Flip open the chassis support foot.





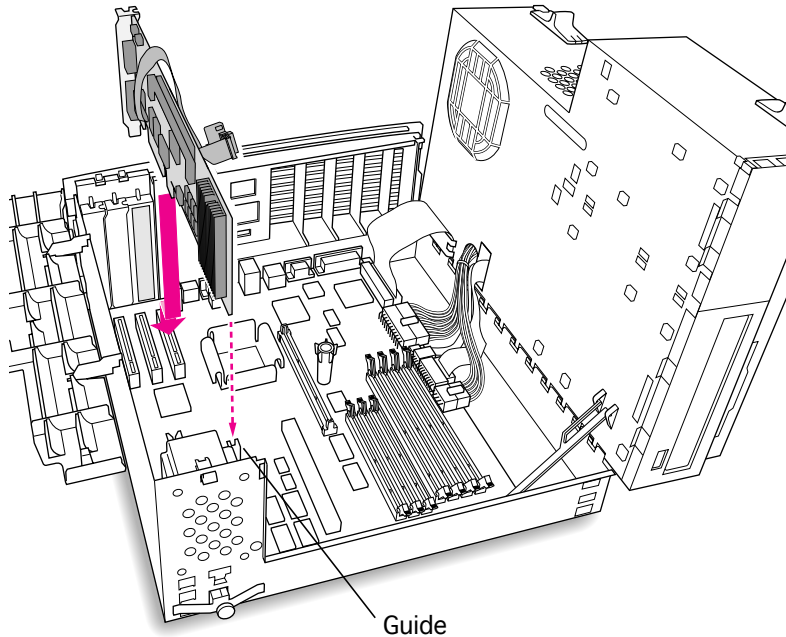
- 5 Release the chassis latches.





- 6 Swing open the chassis to provide access to the logic board.
- 7 Flip down the chassis support arm. Be sure the support arm engages the hole in the bottom chassis so that the arm locks into place.





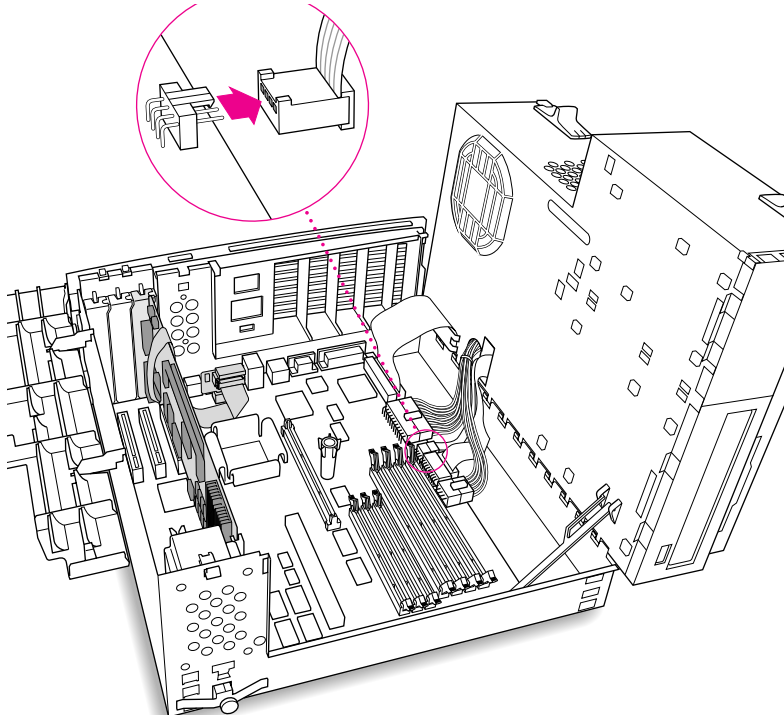
- 8 Insert the card into the slot whose blank PCI slot cover you removed earlier, making sure that the end of the card fits into the card guide at the front of the computer.
- 9 Press down firmly on the card until the connector is fully inserted. Don't force the card. If you meet a lot of resistance, pull the card out and try again.

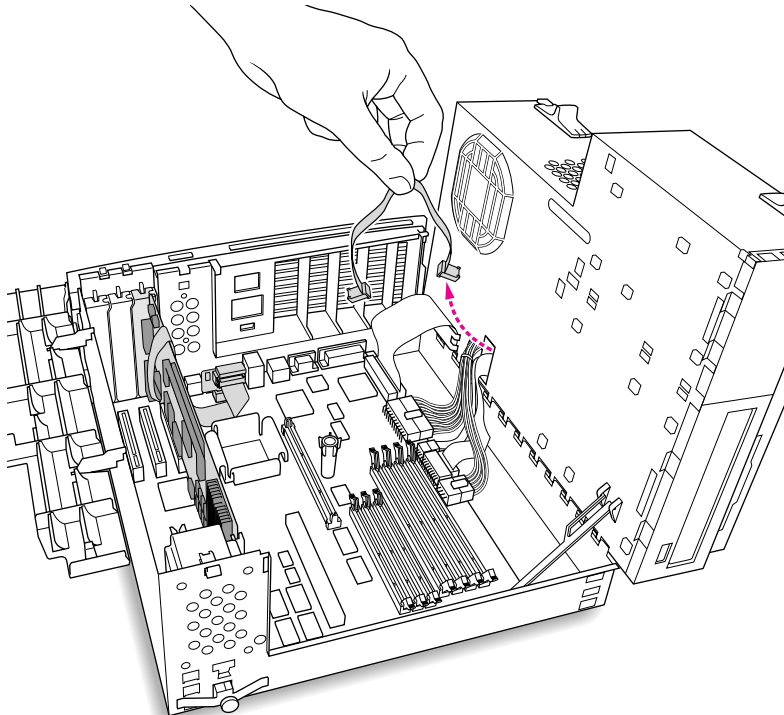






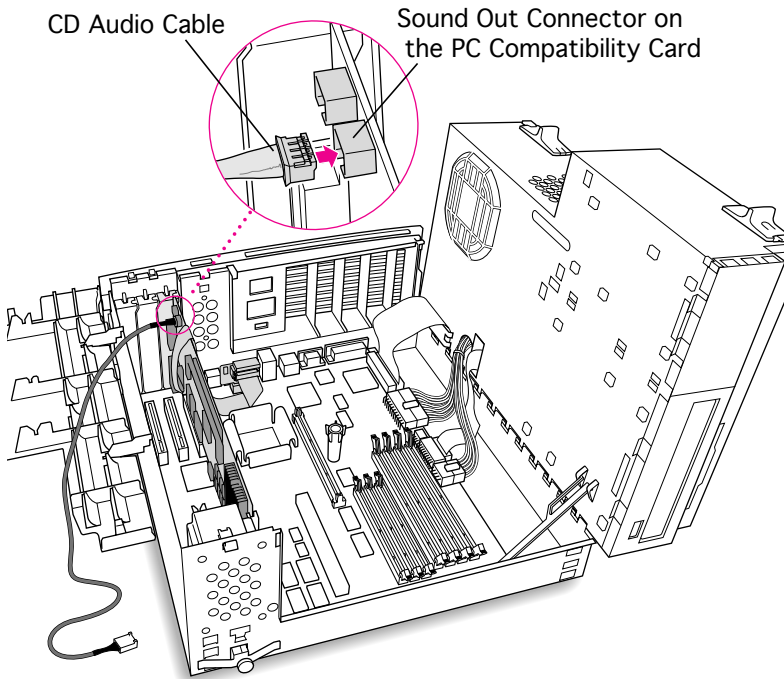
- 10 Disconnect the CD audio cable from the Sound In connector on the logic board.





- 11 Pull the cable through the hole in the chassis and set it aside.



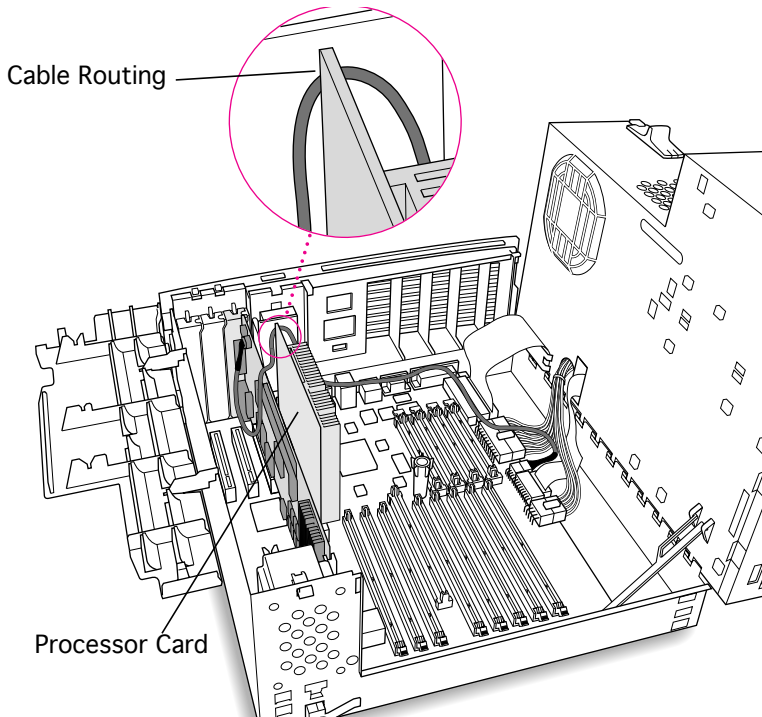


- 12 Plug one of the CD audio cables that came with the PC Compatibility Card into the Sound Out connector on the PC Compatibility Card.

**Note:** The Sound Out connector is next to the CD In connector, which is at the upper-left corner of the card.

**Note:** Two CD audio cables are included in the upgrade kit. They are different colors, but both work the same way.





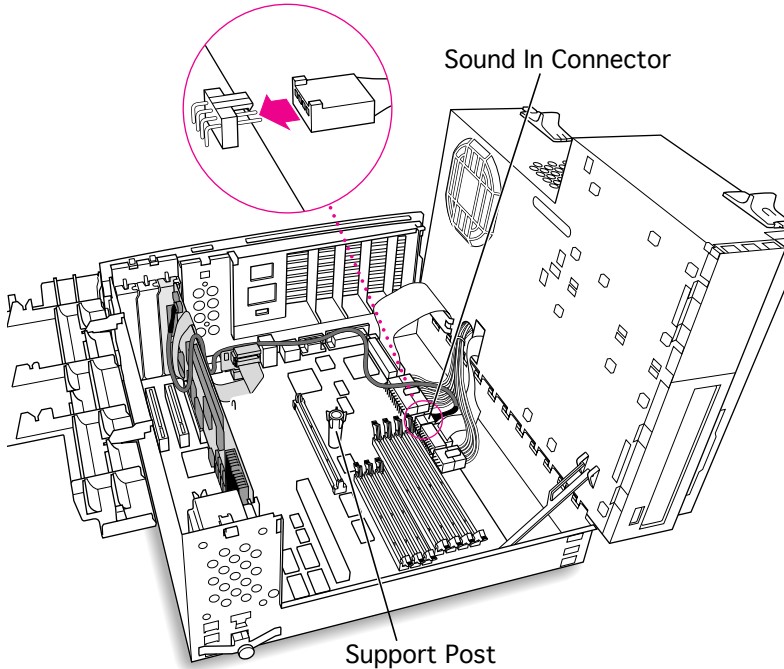
- 13 Route the cable over the top of the PC Compatibility card and between the processor card and the computer's rear panel (not over the top of the processor card). Run the cable along the back edge of the computer's logic board.

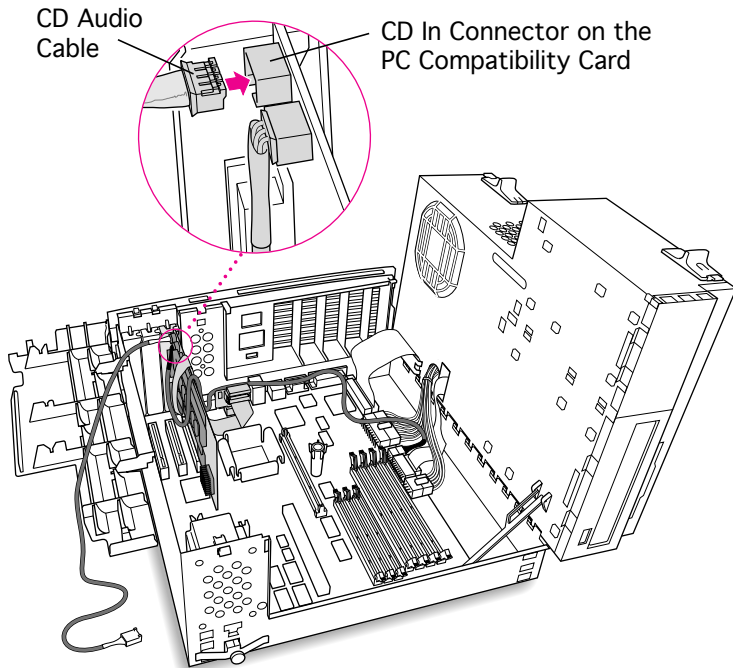
**Note:** Keep the cable away from the center support post.





- 14 Plug the cable into the Sound In connector on the computer's logic board.

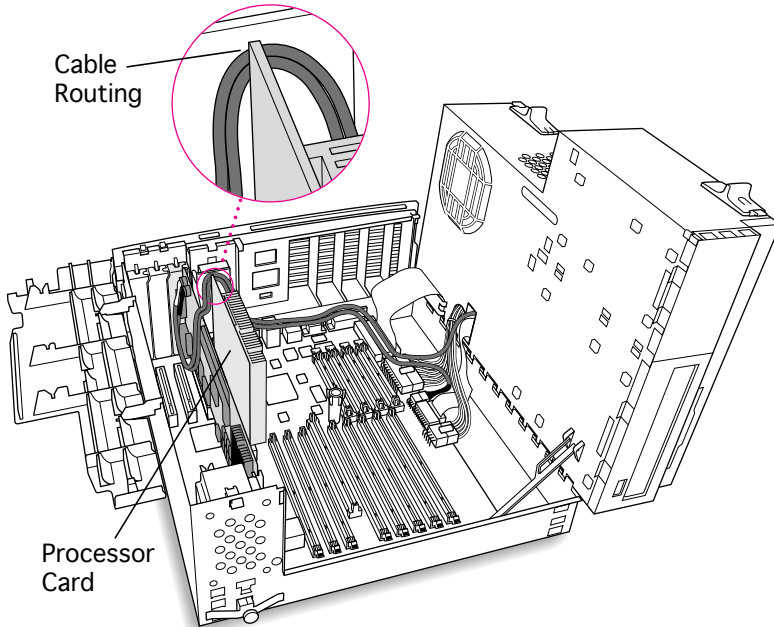




- 15 Connect the second CD audio cable to the CD In connector on the PC Compatibility card.

**Note:** The CD In connector is in the upper-left corner of the card.





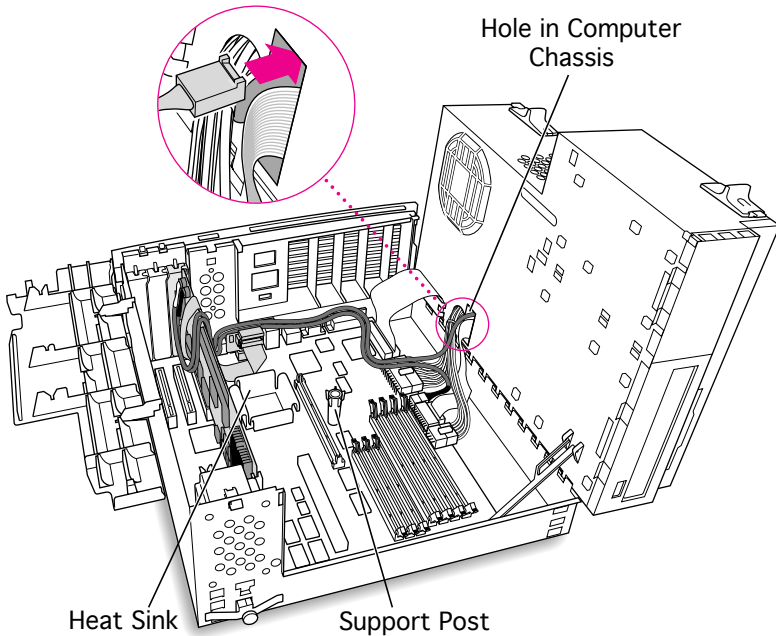
16 Route the second cable over the top of the PC Compatibility card and between the processor card and the computer's rear (not over the top of the processor card). Run the cable along the back edge of the logic board.

**Note:** Keep the cable away from the center support post.

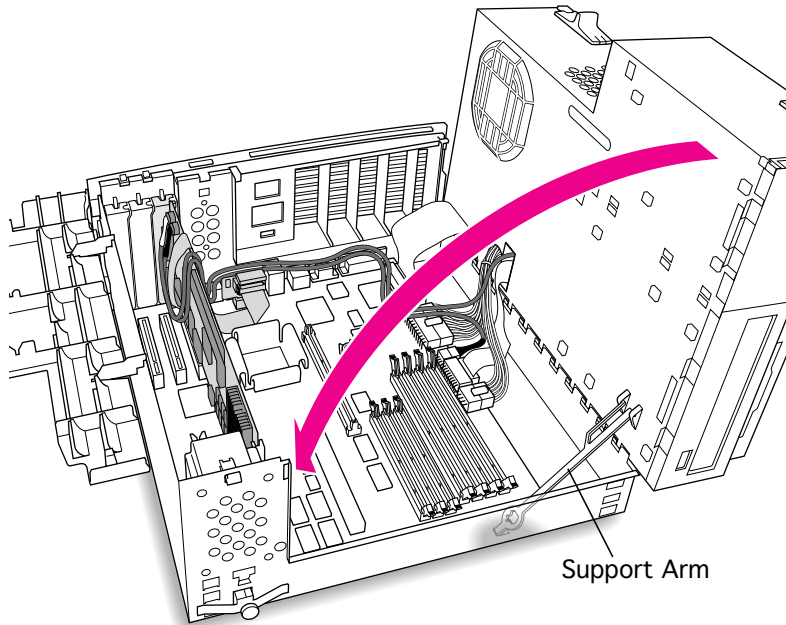




17 Route the second cable through the hole in the computer's chassis.







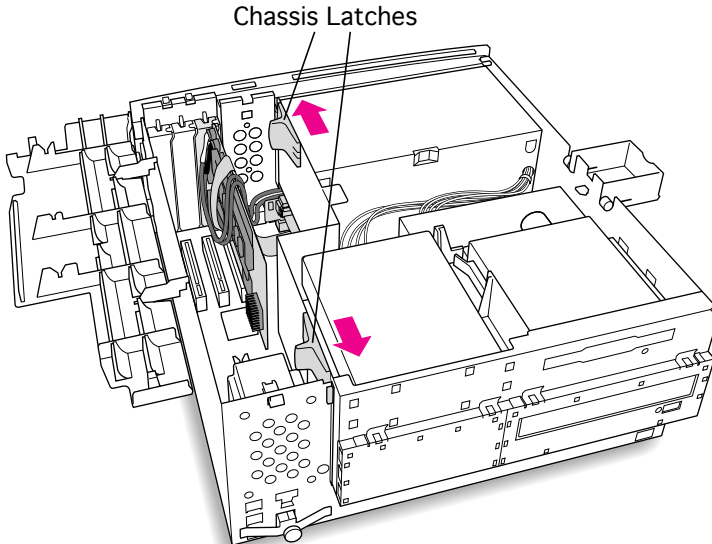
18 Disengage the support arm from the hole in the chassis bottom, and close the computer's upper chassis.

**Note:** Make sure you don't pinch any of the cables between the upper chassis and bottom chassis.



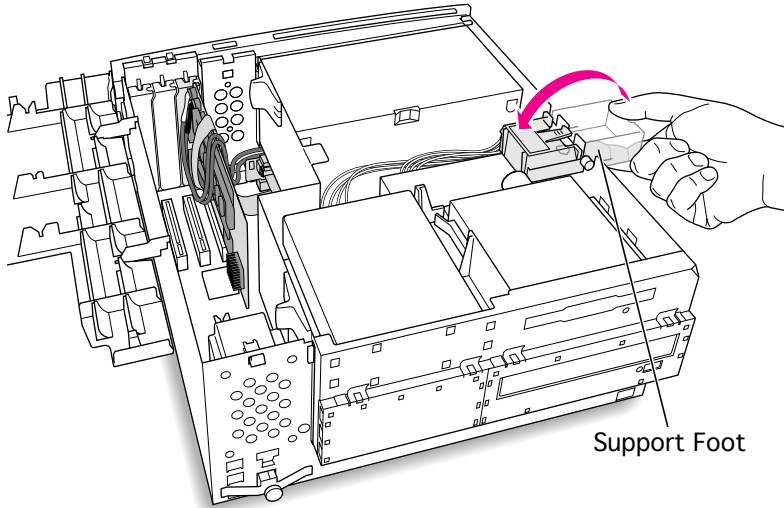


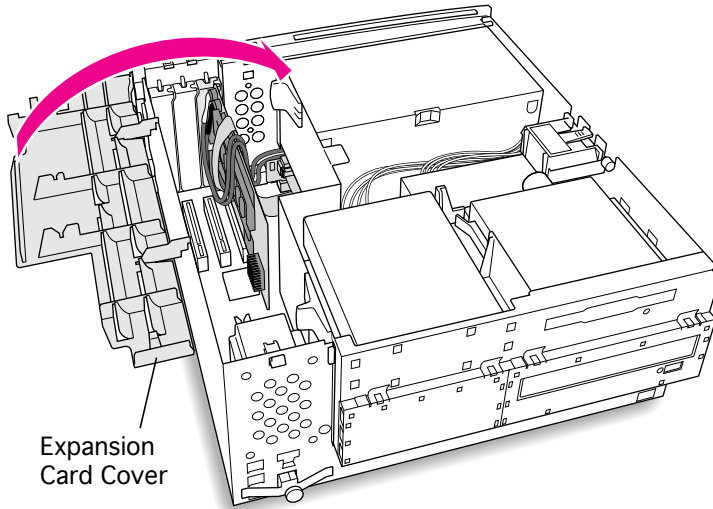
19 Lock the chassis latches.





20 Replace the support foot.

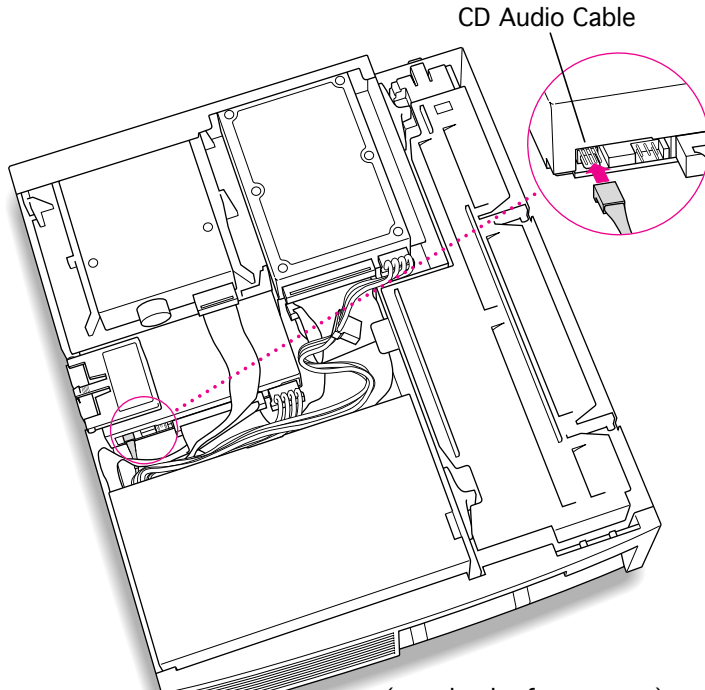




21 Flip the expansion card cover up and snap it back into place. (Be sure to snap the cover back down on both ends.)

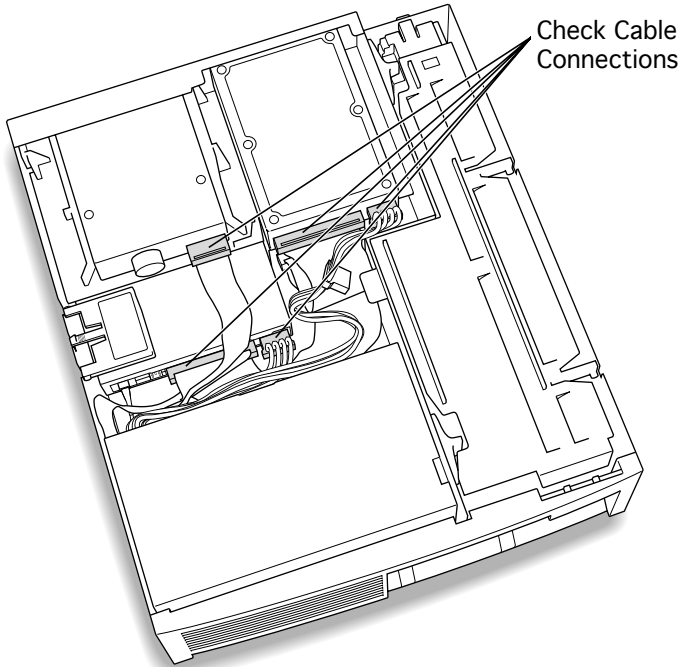
**Note:** If the cover doesn't snap into place easily, make sure no cables are in the way.





- 22 Connect the CD-ROM cable you threaded through the computer's chassis earlier to the Audio connector on the CD-ROM drive.





- 23 Make sure all cables and cards are firmly connected.
- 24 Replace the top housing. (Refer to the Take Apart chapter for instructions.)



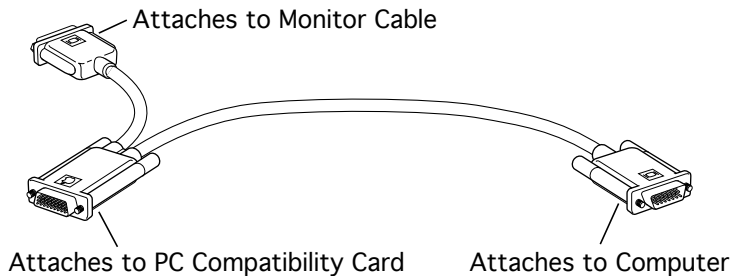


## Connecting Monitors

After you have installed the 12" PC Compatibility Card, connect the monitor(s) as follows to display both PC and Macintosh environments.

**▲Warning:** Do **not** plug a monitor into the joystick port that comes on some models of the PC Compatibility card, and do **not** plug a joystick into a monitor port. Serious damage can result to the equipment.



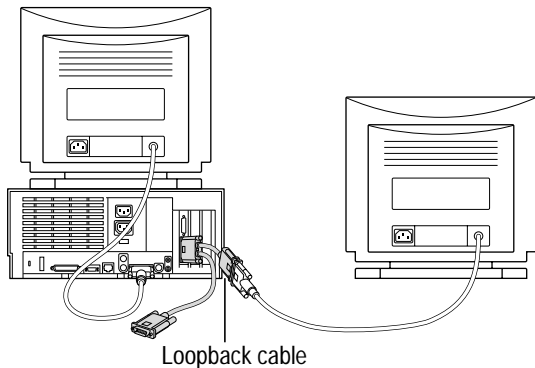


### **To connect a single monitor to the computer:**

- 1 Attach the short connector on the loopback cable to the monitor cable.
- 2 Attach the middle connector on the loopback cable to the PC Compatibility card.
- 3 Connect the long connector on the loopback cable to the computer's monitor port or video card.



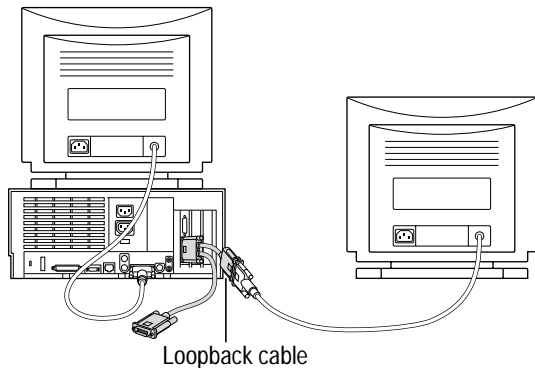




### **To connect two monitors to the computer:**

- 1 Connect the monitor you want to use for the Mac OS environment to the video port on the computer (or to the port on the computer's video card).
- 2 Attach the middle connector on the loopback cable to the PC Compatibility card.
- 3 Attach the short connector on the loopback cable to the second monitor cable.





- 4 In most cases, leave the long connector on the loopback cable unplugged. But if the computer has an additional video port, you can plug the long connector into this additional port. Doing so will allow you to switch the monitor between the PC and Mac OS environments.





## Power Macintosh 7600 Upgrade

The Power Macintosh 7600 Upgrade Kit upgrades a Power Macintosh 7200 to a 7600. The upgraded logic board does not include a processor on the board; it requires that you install a separate processor card to run the machine.

Refer to the Upgrades Chapter in the Power Macintosh 7200 Series/WS 7250 manual for complete installation instructions.





## Parts

---

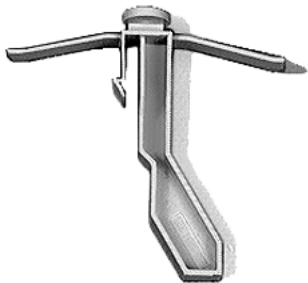
Power Macintosh 7300, 7500, and  
7600 Series





**Actuator, Power, Pkg. of 10**

**922-1644**





### Part Description

This part provides connectors for composite and S-video input and audio input and output (left and right).



**Battery, Lithium, 3.6V, without Leads****922-1262****Note**

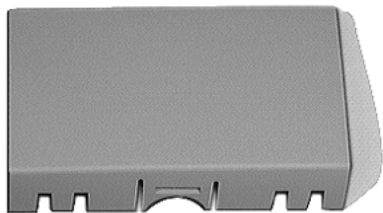
This battery is backward compatible with part number 742-0011.





**Bezel, Blank, 3.5" Drive Bay, Pkg. of 5**

**922-1651**

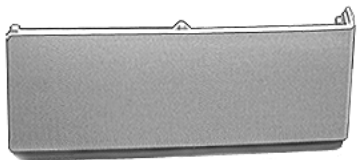






**Bezel, Blank, 5.25" Drive Bay, Pkg. of 5**

**922-1653**

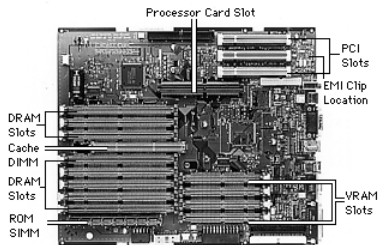




**Bezel, CD-ROM Drive, Pkg. of 5**

**922-1649**

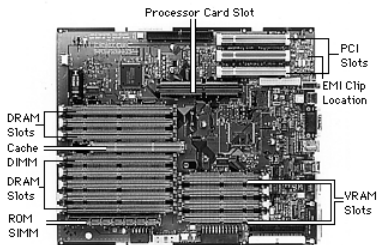


**Board, Logic, PM 7300, 24-Pin****661-1266**



## Board, Logic, PM 7500 (Replaced by 661-1783)

661-0916



### Part Description

You can identify this logic board by the last 3 digits of its EEE code (4X8). The board has: 8 DRAM and 4 VRAM DIMM slots; 3 PCI slots; 1 cache DIMM slot; 1 DAV slot; and 4 MB of ROM. External connectors include: sound in/out; ADB; video; modem; printer; ethernet (10Base-T & AAUI); SCSI; audio input & output; S-Video & composite video input.

### Note

Before you return this board to Apple, remove the processor card, EMI clip, and VRAM, cache, and DRAM DIMMs. The EMI clip may damage the logic board during shipping if not removed. **IMPORTANT:** Remove the EMI clip from the I/O side of the board after taking out the board from the bottom chassis. Failure to remove the EMI clip may damage the board when you place the board on a flat surface. **IMPORTANT:** If the





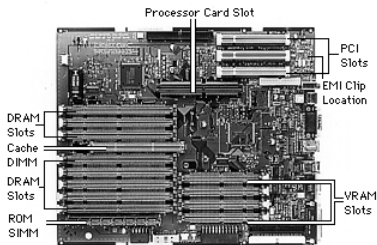
logic board has a ROM SIMM rather than soldered ROMs, return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM.





## Board, Logic, 22-Pin, PM 7500/100

661-1783



### Part Description

This board has: 8 DRAM and 4 VRAM DIMM slots; 3 PCI slots; 1 cache DIMM slot; 1 DAV slot; and 4 MB of ROM. External connectors include: sound in/out; ADB; video; modem; printer; ethernet (10Base-T & AAUI); SCSI; audio input & output; S-Video & composite video input.

### Note

Before you return this board to Apple, remove the processor card, EMI clip, and VRAM, cache, and DRAM DIMMs. The EMI clip may damage the logic board during shipping if not removed. **IMPORTANT:** Remove the EMI clip from the I/O side of the board after taking out the board from the bottom chassis. Failure to remove the EMI clip may damage the board when you place the board on a flat surface. **IMPORTANT:** If the logic board has a ROM SIMM rather than soldered ROMs,





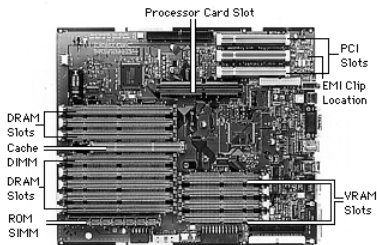
return the defective board with the ROM SIMM in place. DO NOT REMOVE the ROM SIMM.





## Board, Logic, 22-Pin, PM 7600 &amp; WS 8550

661-1154

**Note**

Before you return this board to Apple, remove the processor card, EMI clip, and VRAM, cache, and DRAM DIMMs. The EMI clip may damage the logic board during shipping if not removed. **IMPORTANT:** Remove the EMI clip from the I/O side of the board after taking out the board from the bottom chassis. Failure to remove the EMI clip may damage the board when you place the board on a flat surface. **IMPORTANT:** If the logic board has a ROM SIMM rather than soldered ROMs, return the defective board with the ROM SIMM in place. **DO NOT REMOVE** the ROM SIMM.

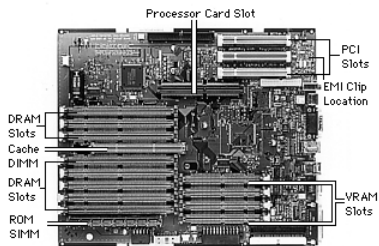






## Board, Logic, PM 7600 Rev. B, 24-Pin

661-1219

**Note:**

Use this board in the Power Macintosh 7600/200.





**Cable, CD-ROM Audio, Pkg. of 5**

**922-1638**



**Cable, Floppy Drive, Pkg. of 5****922-1636****Part Description**

This cable is used to connect the floppy drive to the logic board.



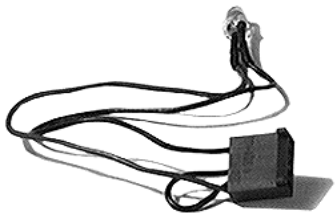
**Cable, Hard Drive/CD-ROM Drive, SCSI****922-1637****Part Description**

This cable is used to connect all internal SCSI devices to the logic board. It does not provide termination.



**Cable, LED****922-0841****Part Description**

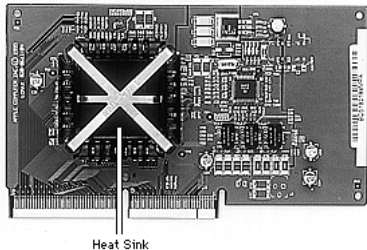
The bulb end of this cable threads through the speaker housing and provides light for the power-on LED. The connector end plugs into the LED connector on the logic board.





## Card, 601 Processor, 100 MHz

661-0917



Heat Sink

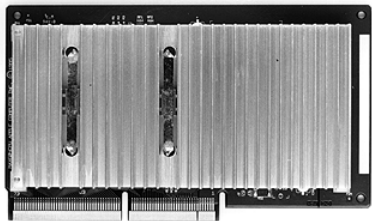
### Part Description

This processor card features a PowerPC 601 chip and operates at 100 MHz. The card plugs into the processor card slot on the Power Macintosh 7500 logic board. **IMPORTANT:** Do not remove the microprocessor's heat sink or you will damage the card.

### Note

The last six digits of the FCC ID label (located on the underside of the processor cards) identify the processor type and speed. The FCC label on this card reads FCCxxx601100, indicating a 601 processor operating at 100 MHz.



**Card, 604 Processor, 120 MHz****661-0925****Part Description**

This processor card is compatible with both the PM 7500 and PM 7600 computers.

**Note**

The last six digits of the FCC ID label (located on the underside of the processor cards) identify the processor type and speed. The FCC label on this card reads FCCxxx604120, indicating a 604 processor operating at 120 MHz. This card has assembly part number 630-1733, 630-1734, 630-2054, or 661-2055.

Install the processor card by aligning the card above the processor card slot and pushing straight down. Verify the processor card is firmly seated along the connector, pushing down again if necessary. Do not attempt to remove the microprocessor's heatsink. This will damage the card.

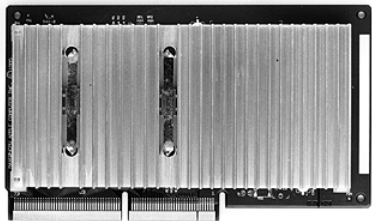




Note: This processor card does NOT work with the WS 8550.





**Card, 604 Processor, 120 MHz****661-1272****Part Description**

This card is compatible with the PM 7500 and 7600.

**Note**

The assembly part number 630-1351 or 630-1568 identifies this particular version of the 120 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

The last six digits of the FCC ID label (on the underside of the card) read FCCxxx604120, indicating a 120 MHz 604 processor.

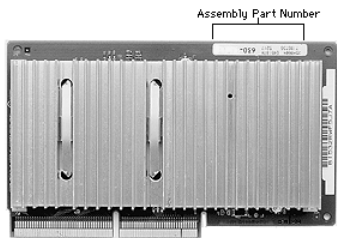
Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.





Note: This processor card does NOT work with the PM 8500 or WS 8550.



**Card, 604 Processor, 132 MHz, Rev. B****661-1157****Part Description**

This card requires an EMI clip (p/n 922-2313). This card works with both the PM 7500 and PM 7600 computers.

**Note**

The last six digits of the FCC ID label (on the underside of the card) read FCCxxx604132, indicating a 604 processor operating at 132 MHz. You must use the assembly part number 630-1885, 630-2059, 630-2269, or 630-2270 to identify this particular version of the 132 MHz card.

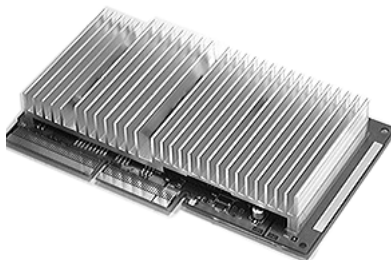
Install the processor card by aligning the card above the processor card slot and pushing straight down. Verify the processor card is firmly seated along the connector, pushing down again if necessary. Do not attempt to remove the





microprocessor's heatsink. This will damage the card.

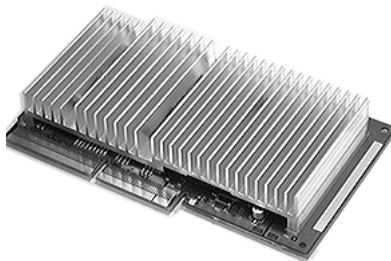


**Card, 604e Processor, 166 MHz****661-1267****Note:**

The assembly part number 630-2122, 630-2248, 630-2488, or 630-2289 identifies this particular version of the 166 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.



**Card, 604e Processor, 180 MHz****661-1305****Note:**

Use this card in the Power Macintosh 7300 Series.

The assembly part number 630-2240, 630-2249, 630-2490, or 630-2491 identifies this particular version of the 180MP MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

A limited number of the first Power Macintosh 7300, 7600/200, 8600, and 9600 systems were shipped with 180 MHz processor cards incorrectly labeled with a use restriction label that says “8500/9500 only.” If the assembly number on the card matches one of the numbers listed above, disregard the use restriction label, as it is incorrect.

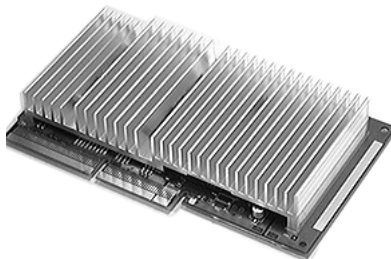




Note that service providers ordering a 180 MHz replacement card may also receive a part that is incorrectly labeled.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.



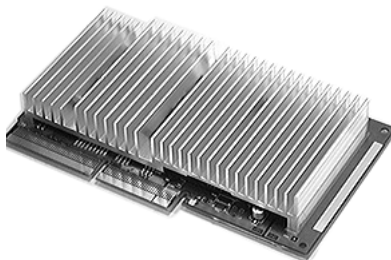
**Card, 604e Processor, 180 MHz****661-1222****Note:**

The assembly part number 630-2099-(A,B,C, or D), 630-2224-(A,B, or C), 630-2240, or 630-2249 identifies this particular version of the 180 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.





**Card, Processor, 604e, 200 MHz****661-1307****Note:**

The assembly part number 630-2201, 661-2204, 630-2250, 630-2480, 630-2481, or 630-2486 identifies this particular version of the 200 MHz card. When ordering a replacement card, use the assembly part number to determine the correct service part number.

A limited number of the first Power Macintosh 7300, 7600/200, 8600, and 9600 systems were shipped with 200 MHz processor cards incorrectly labeled with a use restriction label that says “8500/9500 only.” If the assembly number on the card matches one of the numbers listed above, disregard the use restriction label, as it is incorrect.

Note that service providers ordering a 200 MHz replacement card may also receive a part that is incorrectly labeled.





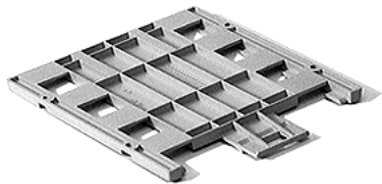
Install this card by aligning the it above the processor card slot and pushing straight down. Verify the card is firmly seated along the connector, pushing down again if necessary. Do NOT attempt to remove the microprocessor's heatsink.





**Carrier, CD-ROM Drive**

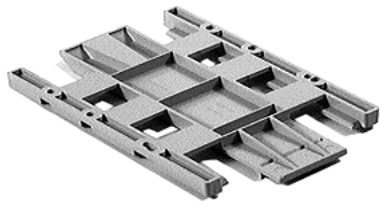
**922-0850**





## Carrier, Hard Drive, Lower Bay

922-1124



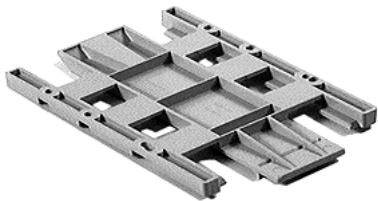
### Part Description

This carrier is used for optional hard drives that may be added in the lower left drive bay only.



**Carrier, Hard Drive/Tape Drive, 3.5"****922-0621****Part Description**

This back loading hard drive carrier is used in the upper drive bay on the Power Macintosh 7500 computer.



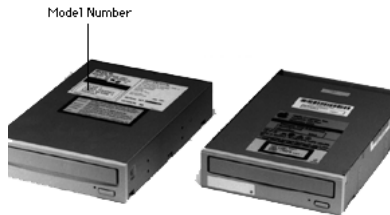


## CD-ROM Drive, AppleCD 600i

661-0913

### Part Description

The Apple CD 600 is a quadruple-speed, internal CD-ROM drive.





## CD-ROM Drive, AppleCD 1200i

661-1240

### Part Description

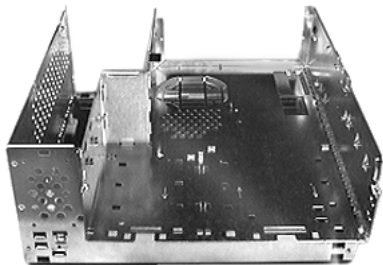
The Apple CD 1200i is an 8x internal CD-ROM drive.

Model Number



**CD-ROM Drive, AppleCD 1800i****661-1415**



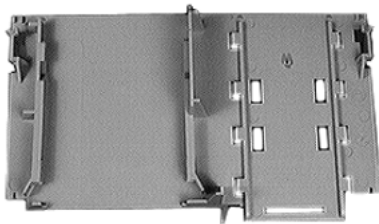
**Chassis, Bottom****922-1641****Product Description**

The bottom chassis includes the internal portion that holds the drives and power supply. The internal portion of the chassis swings open, allowing you to access the logic board without having to remove the drives or power supply.

**Note**

Order an FCC label for the Power Macintosh 7500/100 when replacing the bottom chassis.



**Chassis, Drive****922-1657****Part Description**

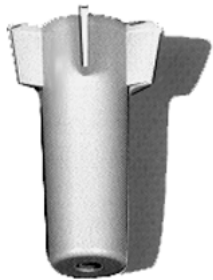
The drive chassis acts as a carrier holding the floppy drive and primary hard drive. No screws are required to attach the drives to this chassis. Drives load from the back.





**Column, Top Cover Support**

**922-1643**

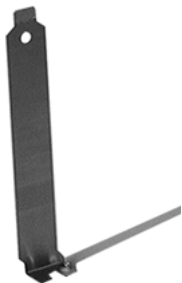




**Cover, Battery Holder**

**520-0344**



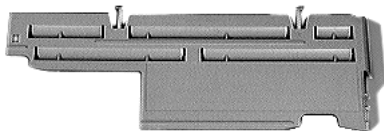
**Cover, Blank, PCI Card, Pkg. of 10****922-1628****Part Description**

This part covers the PCI expansion slots on the rear panel when no PCI cards are installed.



**Cover, Expansion Card****922-1660****Part Description**

The expansion card cover protects and stabilizes the microprocessor card and any optional PCI cards that may be installed in the Power Macintosh 7500 or 7600.



**Part Description**

This part fills the empty video out connector holes in the rear panel when the AV module is installed.

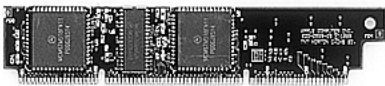


**DIMM, Cache, 256K, 11ns, 160-Pin****661-1035****Note**

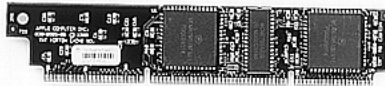
Use this cache DIMM for the Power Macintosh 7200 Series, the Power Macintosh 7600/120 and 7600/132, and the Power Macintosh 8500 Series.

This DIMM may be manufactured by Micron Technologies or Motorola and may have part number 820-0719-B on its PCB. This DIMM is not interchangeable with part number 661-1310.

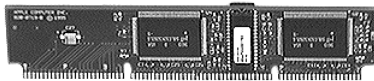
Top



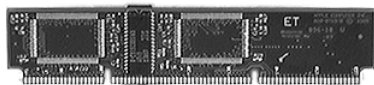
Bottom



Top



Bottom







**DIMM, Cache, 256K, 11ns, 160-Pin**

**661-1310**



**Note**

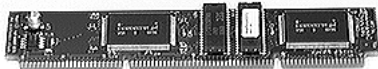
This Cache DIMM is for use with the Power Macintosh 7500/100 and is manufactured by Motorola.





DIMM, Cache, 256K, 11ns, 160-Pin, 5 V

661-1345



**Note:**

This cache DIMM is for use with the Power Macintosh 7300, 8600, and 9600 Series and the Power Macintosh 7600/200.



**DIMM, DRAM, 8 MB, 70 ns, 168-Pin****661-0918**

Front



Back

**Product Description**

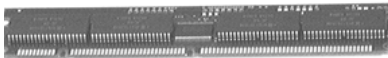
The Power Macintosh 7500 and 7600 use DRAM DIMMs instead of DRAM SIMMs. Whereas SIMMs have 72 pins, DIMMs have 168 pins. The extra pins provide a 64-bit data path, compared to a 32-bit data path for SIMMs. Also, DIMMs do not have to be installed in pairs. (However, to take advantage of memory interleaving with these computers, the DIMMs should be installed in paired slots. See “Memory Configurations” in Basics for more information.)

**Note**

The Power Macintosh 7500 and 7600 computers have no main memory soldered to the logic board. At least one DRAM DIMM must be present for the computer to operate.

**IMPORTANT:** These DRAM DIMMs are not interchangeable with the SIMMs used in previous Macintosh models.



**DIMM, DRAM, 16 MB, 70 ns, 168-Pin****661-0919****Product Description**

The Power Macintosh 7500 and 7600 use DRAM DIMMs instead of SIMMs. Whereas SIMMs have 72 pins, DIMMs have 168 pins. The extra pins provide a 64-bit data path, compared to a 32-bit data path for SIMMs, and DIMMs do not have to be installed in pairs. (However, to take advantage of memory interleaving with these computers, the DIMMs should be installed in paired slots. See “Memory Configurations” in Basics for more information.)

**Note**

The Power Macintosh 7500 and 7600 computers have no main memory soldered to the logic board. At least one DRAM DIMM must be present for the computer to operate.

**IMPORTANT:** These DRAM DIMMs are not interchangeable with the SIMMs used in previous Macintosh models.



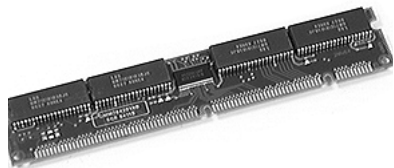


DIMM, DRAM, EDO, 16 MB, 70 ns, 168-Pin

661-1315

**Note:**

Use this DRAM DIMM in the Power Macintosh 7300, 8600, and 9600 Series and the Power Macintosh 7600/200.



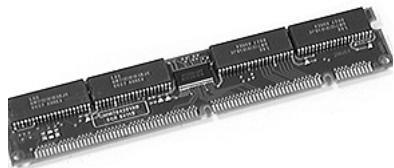


**DIMM, DRAM, 32 MB, 70 ns, 168-Pin, EDO**

**661-1316**

**Note:**

Use this DRAM DIMM in the Power Macintosh 7300, 8600, and 9600 Series and the Power Macintosh 7600/200.





**DIMM, DRAM, EDO, 8 MB, 70 ns, 168-Pin**

**661-1314**

**Note:**

Use this DRAM DIMM in the Power Macintosh 7300, 8600, and 9600 Series and the Power Macintosh 7600/200.





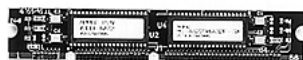
## DIMM, VRAM, 1 MB, 70ns, 112-Pin

661-1036

Top



Bottom

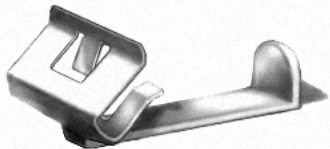


### Note

The Power Macintosh 7500 and 7600 do not have any VRAM soldered on the logic board; VRAM DIMMs (112-pin, 70 ns or faster) must be present to display any video. VRAM DIMMs are not interchangeable with the VRAM SIMMs used in earlier Power Macintosh models. The Power Macintosh 7500/100 and 7600/120 come with two 1 MB VRAM DIMMs installed. You can upgrade to 4 MB of VRAM by installing two more 1 MB VRAM DIMMs in the remaining slots. VRAM DIMMs must be installed in matching pairs and in paired slots.





**EMI Clip, Pkg of 5****922-1721****Part Description**

This part, which installs on the logic board, provides EMI protection for the logic board.

**Note**

The EMI clip must be removed when the logic board is removed from the bottom chassis. To avoid damaging the logic board during shipping, remove the EMI clip before returning the board to Apple.



**EMI Clip, Processor Card****922-2313****Part Description**

This EMI clip is required in the Power Macintosh 7500 and 7600 chassis when the 132 MHz processor card is installed. This EMI clip attaches to the chassis and must touch the processor card.





## Floppy Drive, Apple SuperDrive, 1.4 MB, Manual Insert

661-0121

### Note

Warranty: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say “Warranty Void if Seal Broken” have been tampered with or removed. APPLE REQUIRES SPECIAL PACKAGING; failure to comply with these requirements may result in a packaging noncompliance charge.

**IMPORTANT:** You must install an EMI gasket (p/n 922-1895) when you replace the floppy drive in the Power Macintosh 7500/100.

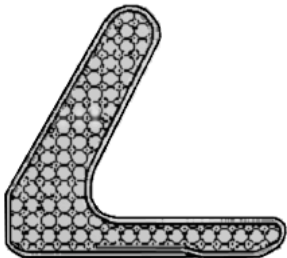




**Foot, Pkg. of 10**

**922-1659**



**Gasket, EMI Shield, Leaf Seal, Pkg. of 10****922-1895****Part Description**

This part provide EMI protection.

**Note**

When replacing the floppy drive, you must install this EMI gasket. Peel off the adhesive and attach the gasket in the center of the drive's top surface, with the "V" of the gasket pointing at the front edge of the drive.



**Hard Drive, 1 GB, SCSI, 3.5" (replaced by 661-1142)****661-0228****Note**

All replacement drives will be shipped without carriers. Return the defective drive without cables and without a carrier. Return the hard drive without the HDA frame, LED cable, and SCSI select cable. Special Packaging Requirements: Pkg. #602-0282. Surcharge \$150.00. Failure to comply with these requirements may result in a packaging noncompliance surcharge. Please refer to Service Price Pages for ordering and pricing information.

Warranty: The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say "Warranty Void if Seal Broken" have been tampered with or removed.





**Hard Drive, 1.2 GB, SCSI, 3.5"**

**661-1142**



**Hard Drive, 2 GB, SCSI, 3.5"****661-0180****Note**

The PM 7600/132 originally shipped with a 1.2 GB hard drive. Apple reserves the right, however, to make changes to product specifications, and due to a temporary shortage of 1.2 GB drives, Apple shipped some PM 7200/120 computers with 2 GB hard drives.

When servicing the PM 7600/132, you should replace the hard drive like-for-like. In other words, if the customer's machine has a 1.2 GB drive installed, you must replace the drive with another 1.2 GB drive (P/N 661-1142); if the customer's machine has a 2 GB drive installed, you must replace the drive with another 2 GB hard drive (P/N 661-0180).







**Hard Drive, 3 GB, SCSI, 3.5"**

**661-1251**



**Hard Drive, 500 MB, SCSI, 3.5"****661-0219****Note**

All replacement drives will be shipped without carriers. Return the defective drive without cables and without a carrier. Return the hard drive without the HDA frame, LED cable, and SCSI select cable. Special Packaging Requirements: Pkg. #602-0282. Surcharge \$150.00. Failure to comply with these requirements may result in a packaging noncompliance surcharge. Please refer to Service Price Pages for ordering and pricing information.

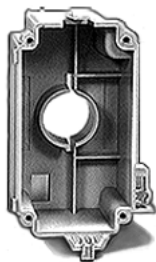
**Warranty:** The drive warranty will be void and Apple will return the module to the service provider without repair if the drive bar code label, manufacturer identification label, Apple capacity or EPROM label, or labels that say "Warranty Void if Seal Broken" have been tampered with or removed.





Housing, Speaker

922-1640



**Housing, Top****922-1642****Note**

The product name is not printed on the top housing. You must order a product ID label when you order the top housing.



**Keyboard, AppleDesign (discontinued and replaced by 922-2832****661-0310****Part Description**

International versions of this keyboard include:

- B661-0310 British version
- C661-0310 French Canadian version
- D661-0310 German version
- E661-0310 Spanish version
- F661-0310 French version
- T661-0310 Italian version

**Note**

The US version of this keyboard must now be ordered as 922-2832. Orders are no longer accepted for 661-0310. Do not return this keyboard to Apple. The international versions of this keyboard (661-0310 B/D/F/E/S/T) are still valid part numbers and should be returned to Apple for replacement.





## Keyboard, AppleDesign

922-2832





**Label, FCC, Power Macintosh 7300/7600, Pkg. of 10**

**922-2696**





**Label, FCC, Power Macintosh 7500, Pkg. of 10**

**922-1646**

**Note**

This part is required when replacing the bottom chassis.







**Label, Product ID, PM 7500/100, Pkg. of 10**

**922-1647**

### **Part Description**

The product name is not printed on the top housing. You must order a product ID label when replacing the top housing.





**Label, Product ID, PM 7600/120, Pkg. of 10**

**922-2152**

### **Part Description**

The product name is not printed on the top housing. You must order a product ID label when replacing the top housing.



**Latch, Internal Chassis, Pkg. of 10****922-1656****Part Description**

The internal chassis latch secures the internal chassis to the external chassis.





**Microphone, Apple PlainTalk**

**922-0867**





## Mouse II, Apple Desktop Bus, Version B (Discontinued and Replaced by 922-2733)

661-0104

### Note

P/N 661-0104 and P/N 661-0763 are similar. To differentiate the two, check the connector at the end of the cable. P/N 661-0763 has a number printed on the connector; P/N 661-0104 has no number. The retainer for P/N 661-0104 is available with or without a small locking hole. There are two versions of the retainers with holes: version M, P/N 922-1242, and version L, P/N 922-1109. If the product label on the bottom of the mouse begins with “M,” and the retainer has a hole, order P/N 922-1242; if the product label begins with “L,” and the retainer has a hole, order P/N 922-1109. If the retainer does not have a hole, order P/N 922-0345. The retainers are not interchangeable; be sure to order like for like.



**Mouse II, Apple Desktop Bus, Version B****922-2733****Note**

P/N 922-2733 and P/N 661-0763 are similar. To differentiate the two, check the connector at the end of the cable. P/N 661-0763 has a number printed on the connector; P/N 922-2733 has no number. The retainer for P/N 922-2733 is available with or without a small locking hole. There are two versions of the retainers with holes: version M, P/N 922-1242, and version L, P/N 922-1109. If the product label on the bottom of the mouse begins with “M,” and the retainer has a hole, order P/N 922-1242; if the product label begins with “L,” and the retainer has a hole, order P/N 922-1109. Note: The retainers are not interchangeable; be sure to order like for like.





**Nameplate, Power Macintosh 7300/166 MHz**

**922-2639**





**Nameplate, Power Macintosh 7300/180 MHz**

**922-2640**







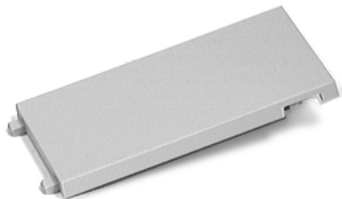
**Nameplate, Power Macintosh 7300/200 MHz**

**922-2641**



**Nameplate, Power Macintosh 7600/200 MHz****922-2642****Panel, Blank, AV Module, Pkg. of 5922-1722****Note:**

This panel is for use with the Power Macintosh 7300 and 9600 Series.





Panel, Rear

922-1655





**Power Cord, Smoke**

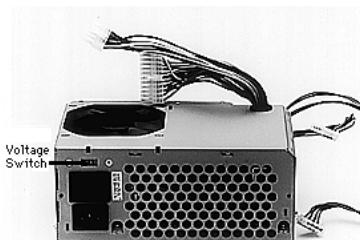
**590-0380**





## Power Supply, 150 W

661-0920



### Part Description

This power supply has two cables that attach to the logic board: the 22-pin connector provides 5 V and +/- 12 V power for the logic board, and the 10-pin connector provides 3.3 V power for the processor card.

### Note

The power supply can be set to 115V or 230V via a switch on its back side. The switch is accessible through the computer's rear panel when the power supply is installed. **IMPORTANT:** The power supply must be set to 115V in the U.S.





**Power Supply, 150 W**

**661-1244**

**Part Description**

**Note**



**Rail, Drive, Pkg. of 10****922-1658****Part Description**

The Power Macintosh 7500 and 7600 have four drive rails, which are installed in the metal chassis, directly beneath the plastic drive chassis. These rails hold the CD-ROM drive carrier and optional hard drive carrier.





**Screw, M2.5x8mm, Pkg. of 10**

**922-0077**







**Screw, M3.1X10, TORX-T10, Pkg. of 10**

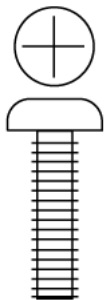
**922-1672**





**Screw, M3.5x0.6x10mm, Pkg. of 10**

**922-0119**





**Screw, M3.5x0.6x20mm, Pkg. of 10**

**922-0116**





**Screw, M3.5X5MM, Pkg. of 10**

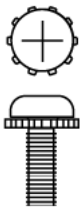
**922-1671**





**Screw, M3x8mm, Pan Head, Philips, Pkg. of 10**

**922-0401**





**Screw, Sems, 6-32 x .250, Pkg. of 10**

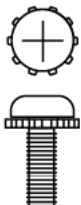
**922-2224**





**Screw, Sems 6-32x.313 PN CRS**

**440-6105**



**Security Bar****922-2688****Note:**

This part is for use with the Power Macintosh 7300 and the Power Macintosh 7600/200.







**Shield, Blank Bezel, 5.25" Drive Bay, Pkg. of 5**

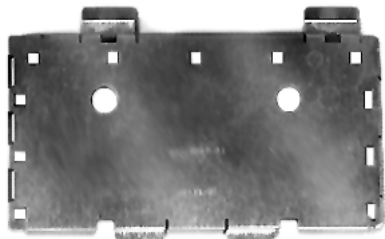
**922-1654**





**Shield, Blank, 3.5" Drive Bay, Pkg. of 5**

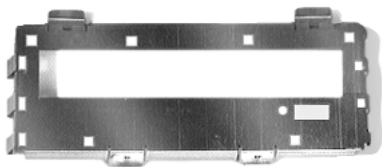
**922-1652**





**Shield, CD-ROM Drive, Pkg. of 5**

**922-1650**





**Shield, Floppy/Hard Drive, Pkg. of 5**

**922-1648**





Speaker

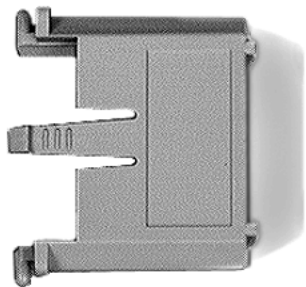
922-1639



**Support Arm, Internal Chassis, Pkg. of 5****922-1730****Part Description**

This part supports the internal chassis and prevents it from accidentally closing when it is in the open position.



**Support Foot, Internal Chassis, Pkg. of 5****922-1661****Part Description**

This part provides support for the chassis when the internal section of the chassis is swung open.



**Telecom Adapter, US/Canada/Hong Kong/Latin America****661-1703****Part Description**

The Japanese version of the Telecom adapter is part number J661-1703.





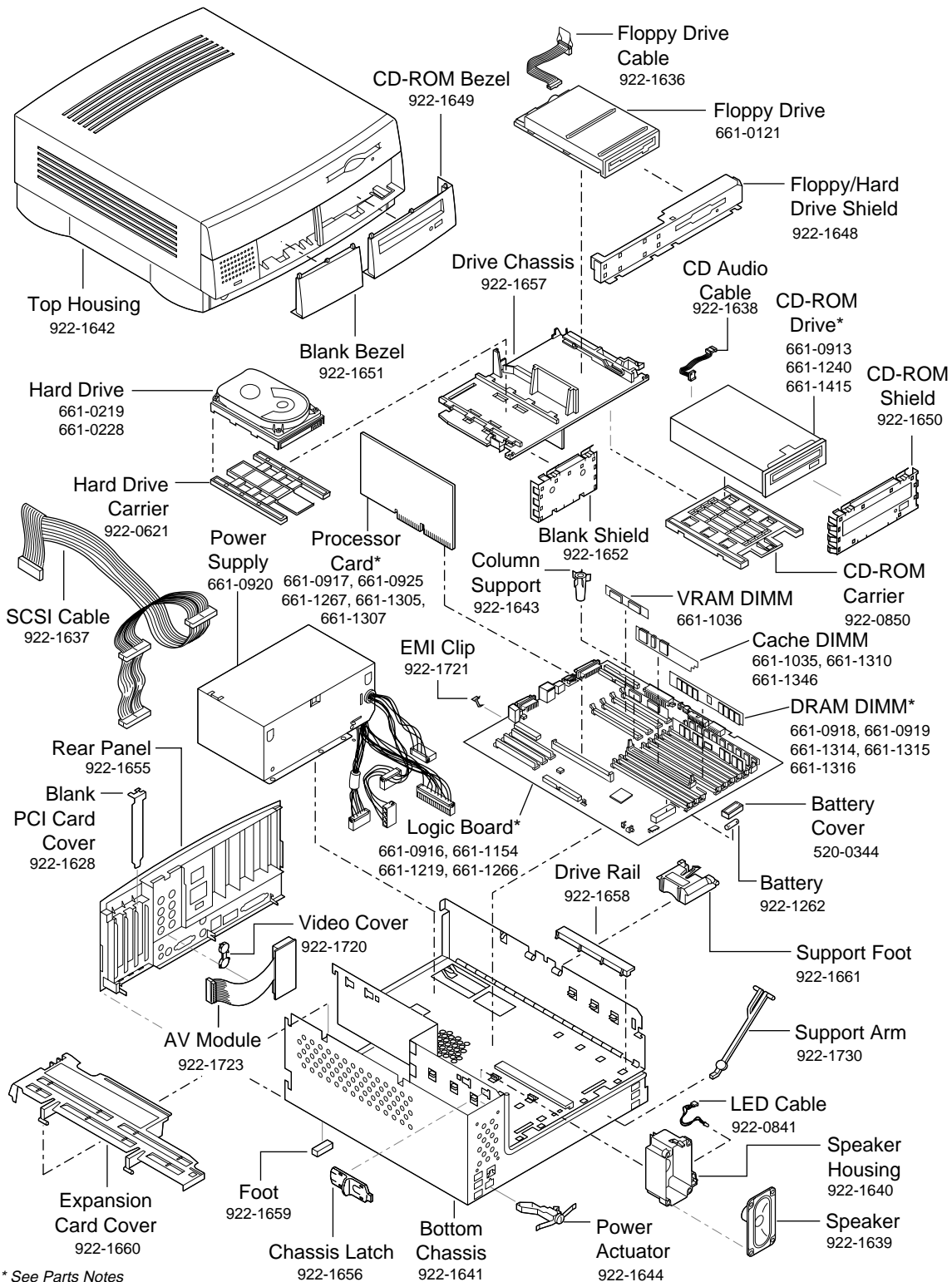


## Exploded View

---

Power Macintosh 7300, 7500, and  
7600 Series





Power Macintosh 7300, 7500, and 7600 Exploded View

