

# 1

## Installing the PC Compatibility Card in a 5400 Series Macintosh Computer

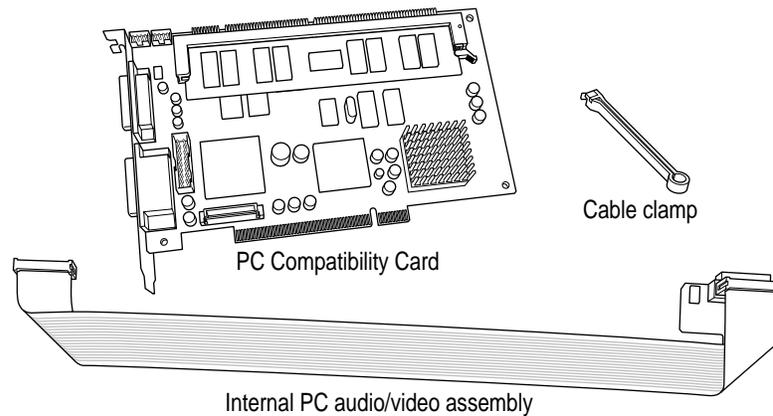


This chapter describes how to install the PC Compatibility Card hardware in a 5400 series Macintosh computer, such as the Macintosh Performa 5400, Macintosh Performa 5420, and the Power Macintosh 5400.

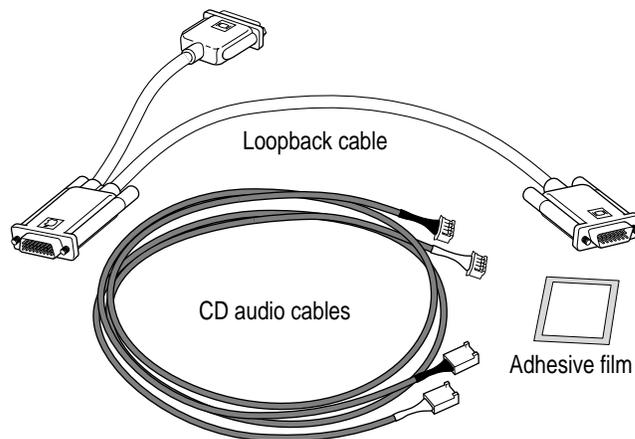
**IMPORTANT** If you received this manual with a computer, the PC Compatibility Card hardware is already installed. Skip ahead to “Connecting Another Monitor to a 5400 Series Macintosh Computer” later in this chapter. If you want to install additional memory on your card or learn more about installing and using PC software, see the *PC Compatibility Card User’s Manual*.

## What you need

Before beginning the installation process, make sure you have all the parts and tools that are necessary to install the card in your computer. To install the card in a 5400 series Macintosh computer, you need the PC Compatibility Card, the internal PC audio/video assembly, and the cable clamp. You also need a Phillips screwdriver.



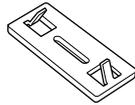
You won't need the CD audio cables shown below. Also, the loopback cable is only necessary if you plan to attach an external monitor to your computer.



You only need the plastic access port cover and metal retainer if you are removing the Apple External Video Connector during the PC Compatibility Card installation.

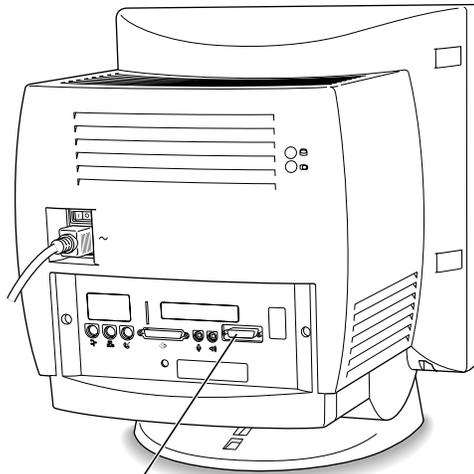


Plastic access port cover



Metal retainer

The Apple External Video Connector and the PC Compatibility Card cannot be installed together into a 5400 series Macintosh computer. If your computer has the video connector shown below, you will have to remove it during the installation of the PC Compatibility Card.



If this connector is present, then an Apple External Video Connector is installed in your computer.

Instructions for removing the Apple External Video Connector are included in the installation instructions that follow.

## Installing the PC Compatibility Card hardware

There are several steps to installing your PC Compatibility Card hardware:

- opening the computer
- removing the Apple External Video Connector if there is one installed
- installing the card
- installing the internal PC audio/video assembly
- closing the computer

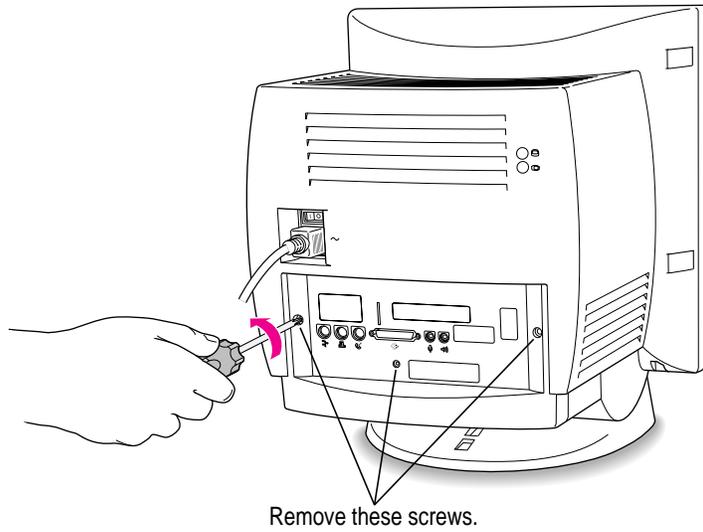
### Opening the computer

**IMPORTANT** To avoid generating static electricity that may damage components, do not walk around the room until you have completed the installation of the PC Compatibility Card and closed the computer. Additionally, move the logic board as little as possible while it is outside the computer case.

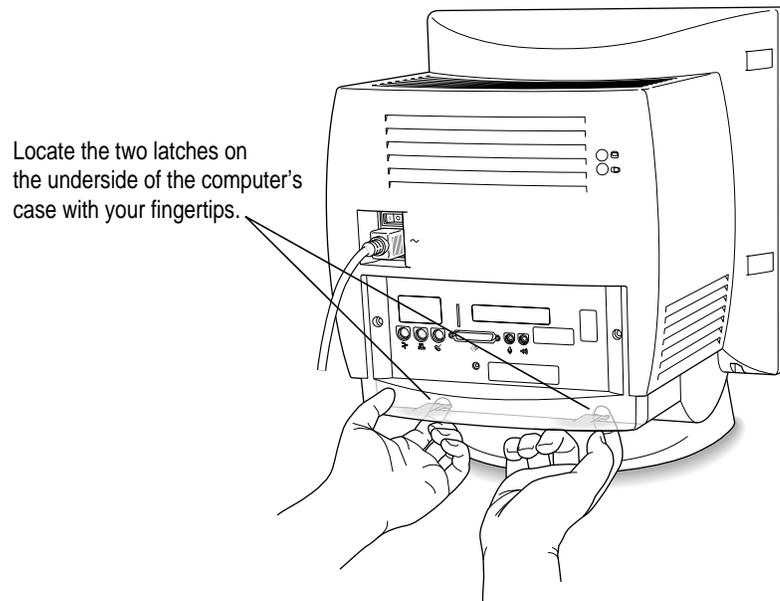
- 1 Shut down the computer.**
- 2 Press the power switch on the back of the computer to turn it completely off.**  
Press the side of the switch marked with the ○ symbol.
- 3 Unplug all the cables except the power cord from the computer (including the cable that connects your keyboard to the computer).**

*Note:* Leaving the power cord plugged in helps protect the computer from damage caused by electrostatic discharge.

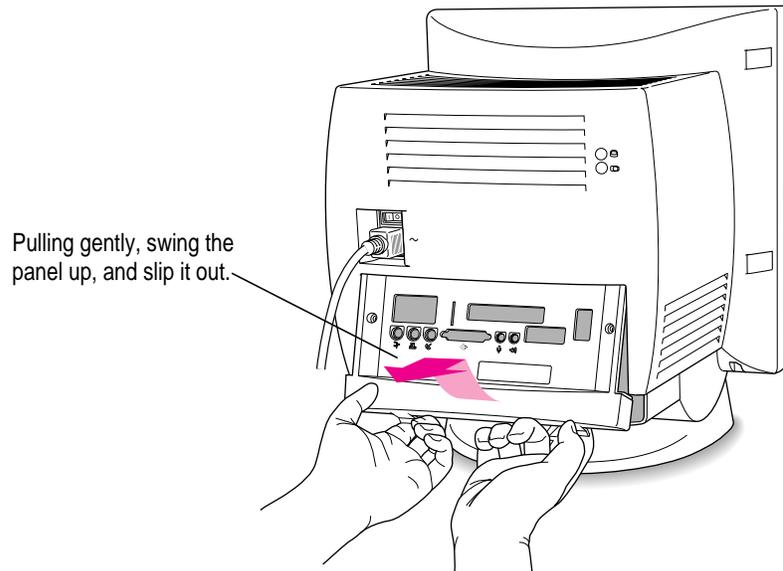
- 4** Remove the security screws from the computer's back panel with a Phillips screwdriver.



- 5** With your fingertips, find the two latches on the underside of the computer's case.

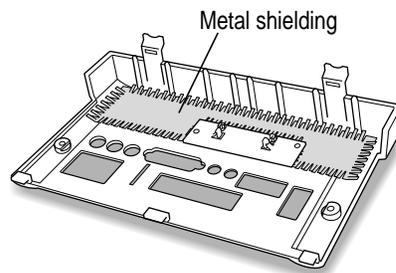


- 6 Pull gently on the latches.
- 7 Swing the panel up and slip it out.



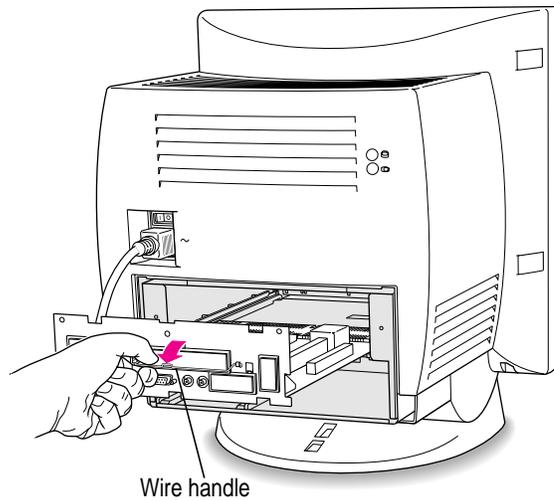
- 8 Carefully set the panel aside.

To protect the metal shielding on the inside of the panel, lay down the panel so that the metal shielding faces up.



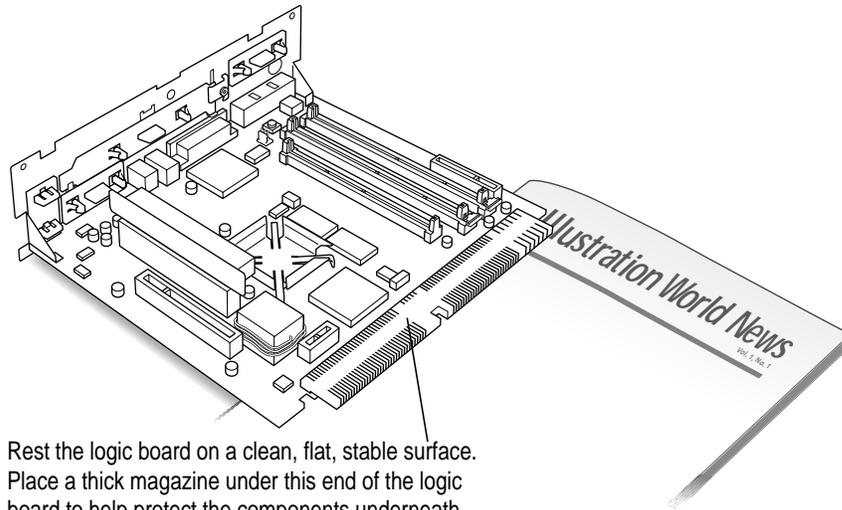
- 9 Pull down on the wire handle and swing it out to unlock it from its storage position. Then grasp the handle and gently pull the logic board out of the computer.**

The vertical plate and the logic board to which it's attached slide all the way out of the computer.



- 10 Place the logic board on a stable, clean, flat surface, and use a thick magazine to prop up one end of the logic board as shown below.

The magazine helps protect the components on the bottom of the logic board during the installation.

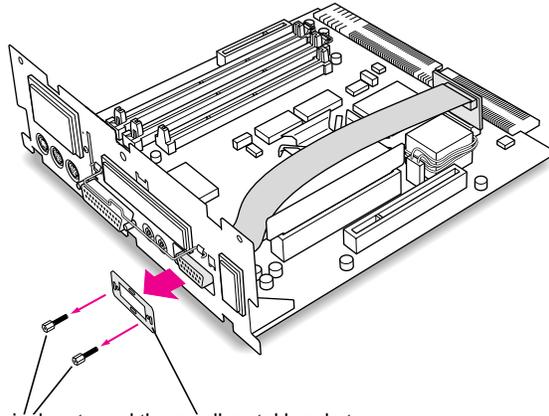


Rest the logic board on a clean, flat, stable surface. Place a thick magazine under this end of the logic board to help protect the components underneath.

## Removing an Apple External Video Connector

This section describes how to remove the Apple External Video Connector if there is one installed on your computer. If your computer does not have a video connector installed, skip ahead now to “Installing the Card.”

- 1** Unscrew the jack nuts from the video connector, and remove the small metal bracket.



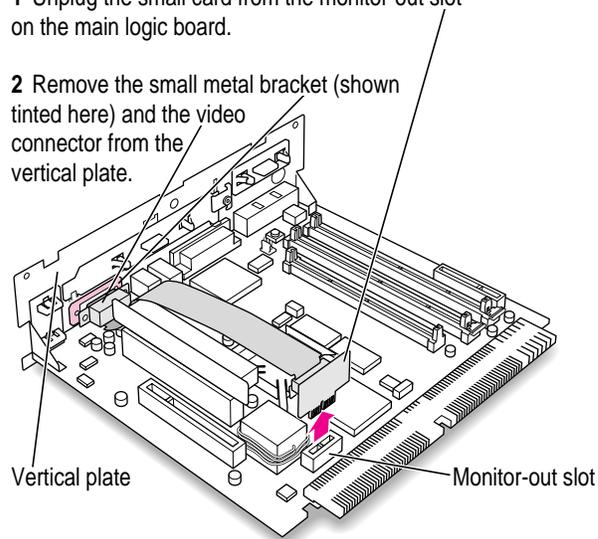
Remove the two jack nuts and the small metal bracket.

**2 Remove the video connector assembly from the logic board.**

Unplug the assembly from the logic board. Then remove the video connector and the other metal bracket from the vertical plate.

**1** Unplug the small card from the monitor-out slot on the main logic board.

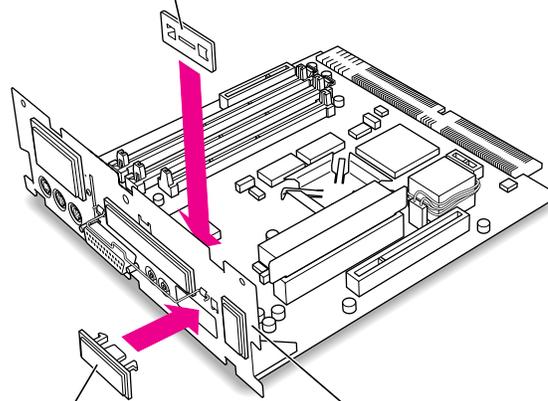
**2** Remove the small metal bracket (shown tinted here) and the video connector from the vertical plate.



**3 Install the plastic access port cover and the metal retainer to cover the opening on the vertical plate.**

Place the metal retainer over the opening on the inside of the vertical plate. Then insert the access port cover through the opening on the other side, and snap it into the metal retainer.

**1** Place the metal retainer over the opening on the *inside* of the vertical plate.



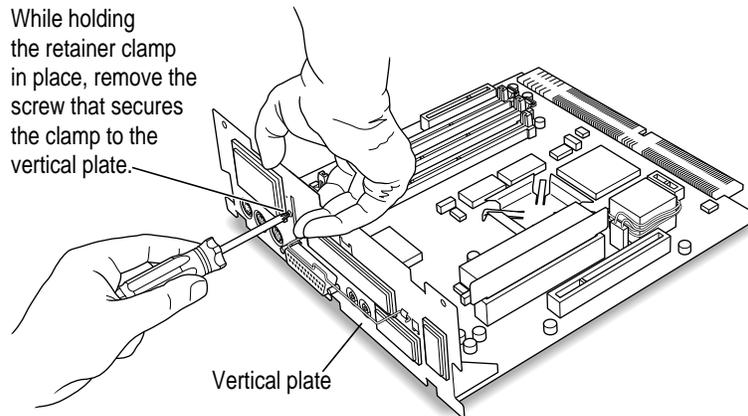
**2** Insert the access port cover through the opening, and snap it into the metal retainer.

## Installing the card

- 1 **Unscrew the retainer clamp screw from the front of the vertical plate, while holding in place the clamp on the back.**

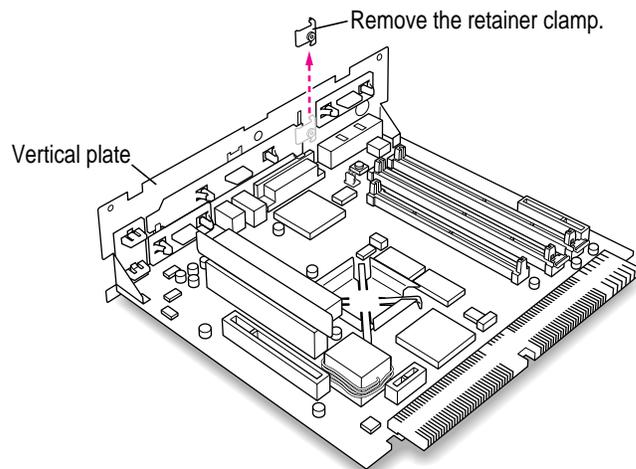
Avoid letting the retainer clamp fall onto the logic board.

While holding the retainer clamp in place, remove the screw that secures the clamp to the vertical plate.



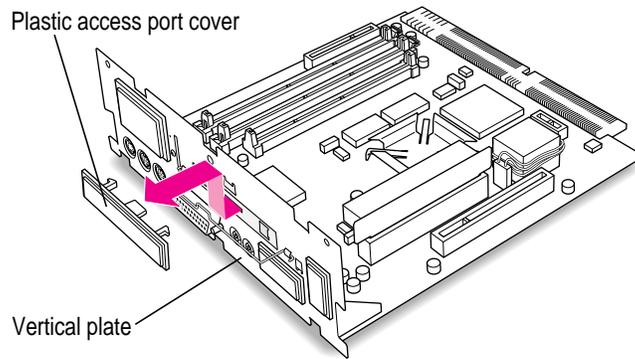
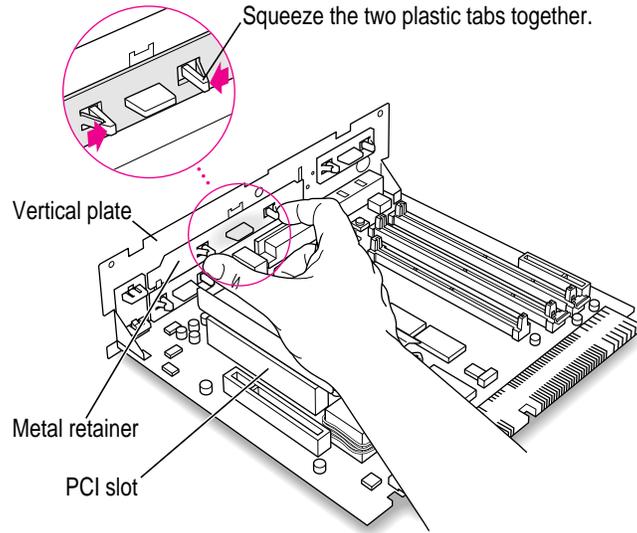
- 2 **Lift out the retainer clamp and set it aside.**

You'll need the retainer clamp later, after you install the card.

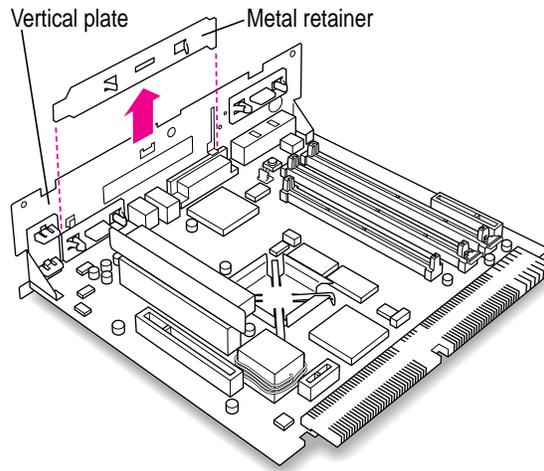


**3 Remove the plastic access port cover from the vertical plate.**

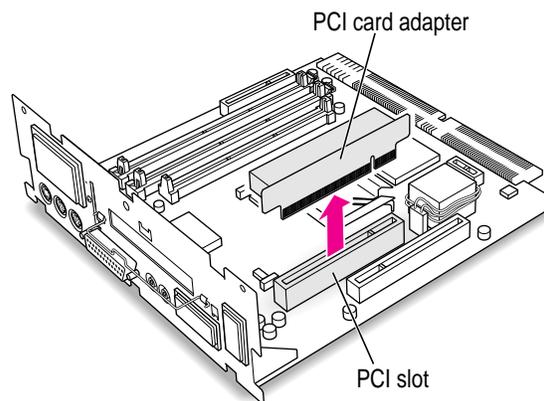
Squeeze together the two plastic tabs holding the access port cover in place; then pull the access port cover off from the outside.



- 4 Remove the metal retainer from the inside of the vertical plate.



- 5 Remove the PCI card adapter from the main logic board.

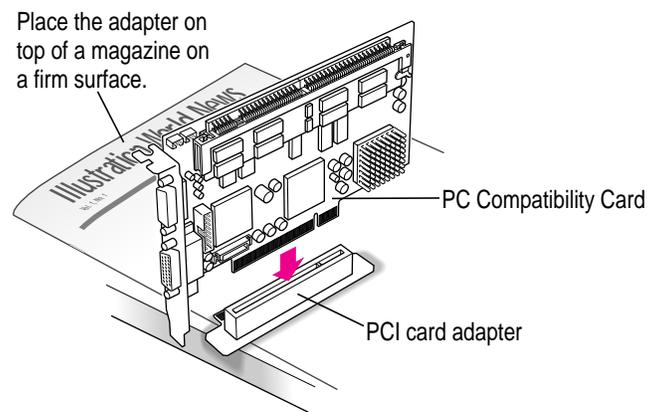


- 6 Remove the PC Compatibility Card from its static-proof bag.  
Hold the card by its edges to avoid touching any of its connectors.

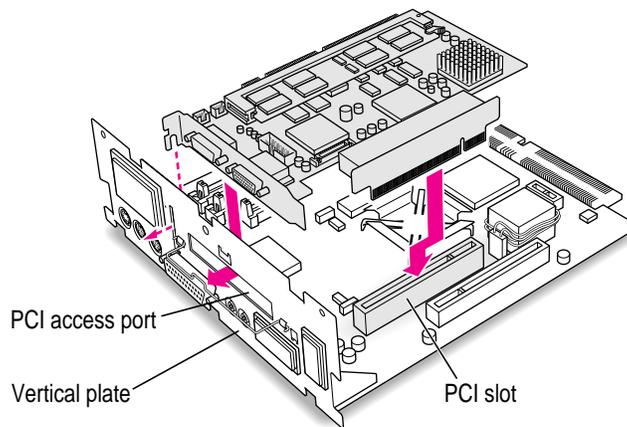
**7 Connect the PC Compatibility Card and the PCI card adapter.**

Place the adapter on top of a magazine on a firm surface. (Make sure the magazine is thick enough to protect your working surface from being scratched by the metal pins on the adapter.)

Press the card firmly into the adapter. You may find it helpful to place the card and the adapter near the edge of a table with the metal edge of the card hanging over the end of the table. In this position, you can easily insert the card completely into the adapter.

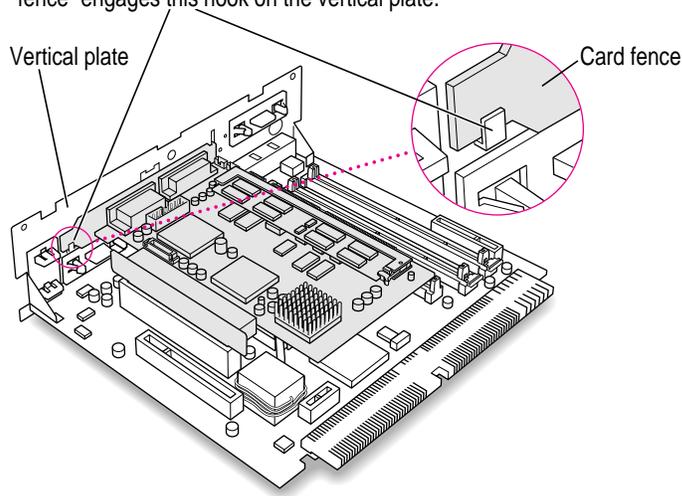


**8 Align the PC Compatibility Card and the adapter over the PCI slot.**



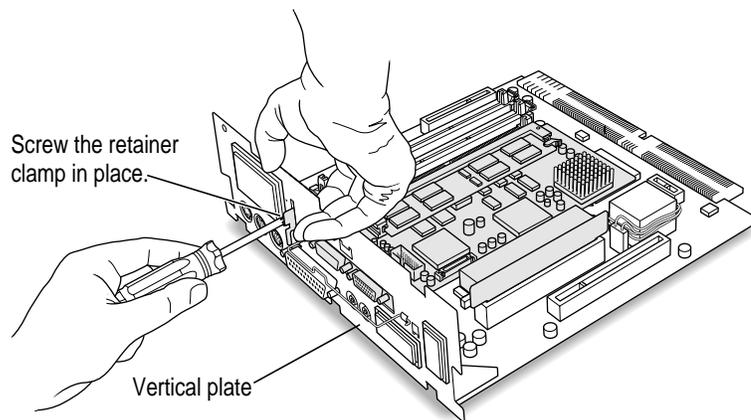
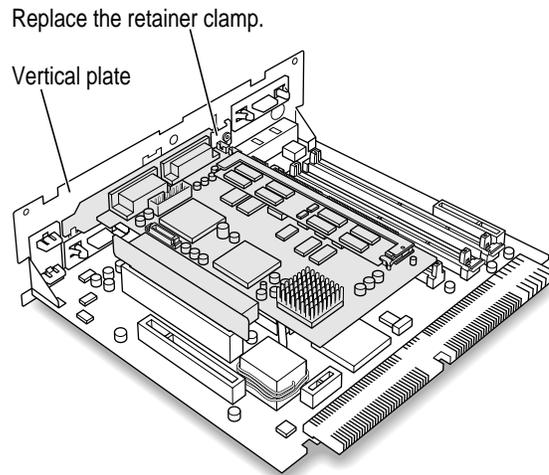
- 9 **Insert the adapter into the PCI slot on the main logic board. Make sure the metal fence on the PC Compatibility Card engages the hook on the vertical plate and that the connectors on the card protrude through the PCI access port opening.**

The card is properly seated when the card's metal "fence" engages this hook on the vertical plate.



If you meet resistance, pull the adapter out and try again. To see if the adapter is properly connected, lift it gently. If it resists and stays in place, it's connected.

**10** Insert the retainer clamp back into the hole and hold it there while you screw it into place.

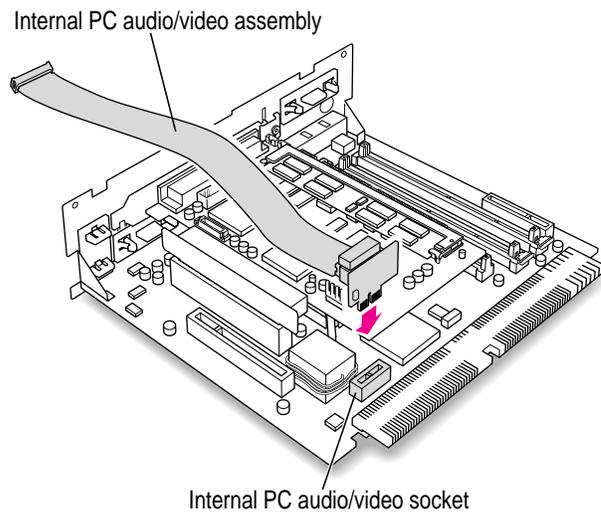


## Installing the internal PC audio/video assembly

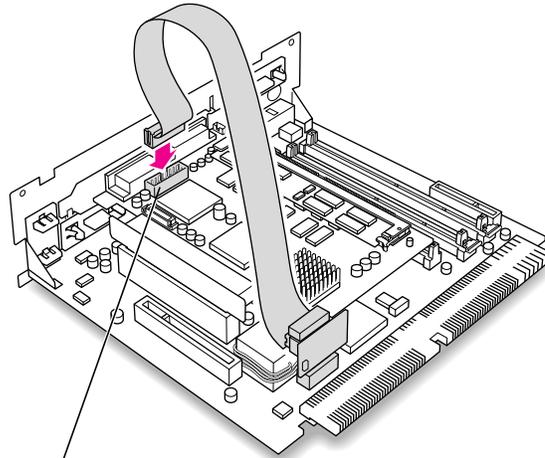
- 1 Pick up the internal PC audio/video assembly, and unfold the two folds in the cable. You should unfold the folds near each connector so that the cable is straight.



- 2 Plug the large end of the internal PC audio/video connector into the socket on the computer's main logic board.



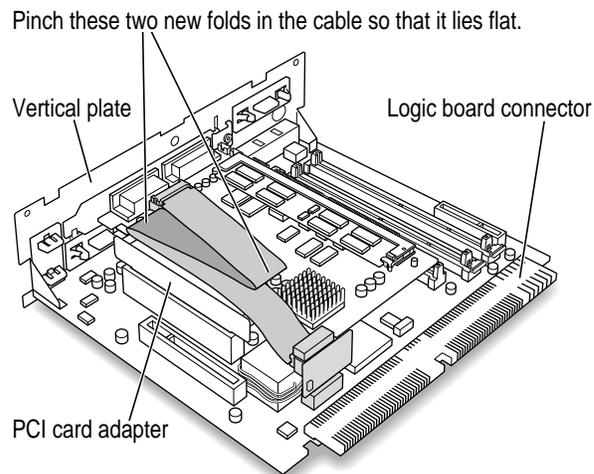
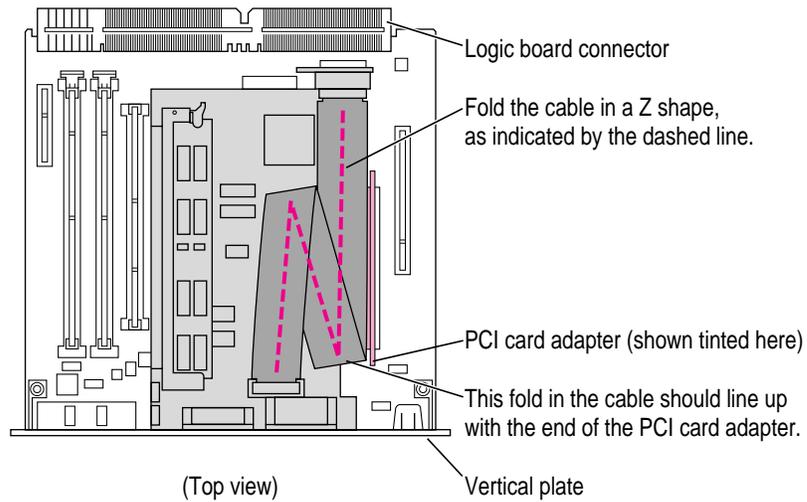
- 3 Insert the small end of the internal PC audio/video assembly into the socket in the corner of the PC Compatibility Card.



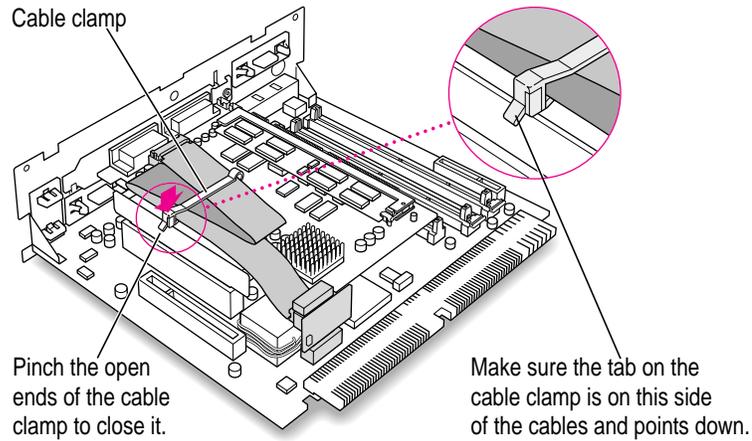
Internal PC audio/video socket

- 4 **Fold the slack in the internal PC audio/video assembly cable into the shape of a Z on top of the card. Firmly pinch the two new folds so that the cable lies flat along the top of the card.**

**IMPORTANT** Do not press down too hard on the top of the card. Applying excessive pressure to the card may damage the card and your logic board. Once you have folded the slack in the cable into a loose Z shape on top of the card, firmly pinch the new folds in the cable so that it lies flat.

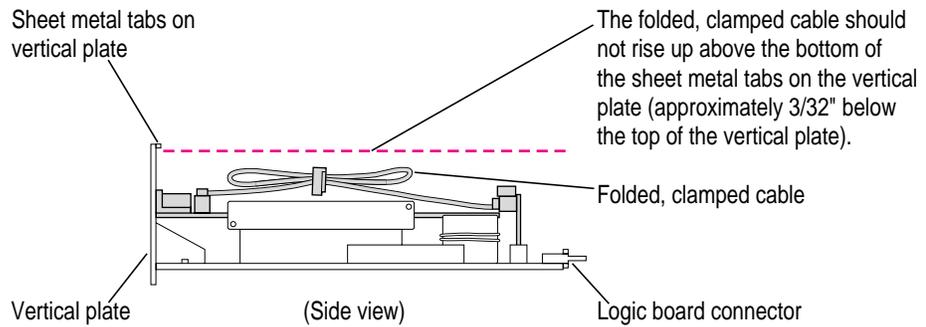


- 5** Slip the cable clamp over the three folds in the internal PC audio/video assembly cable. Then pinch the open ends of the cable clamp to close it and hold the folds in place.



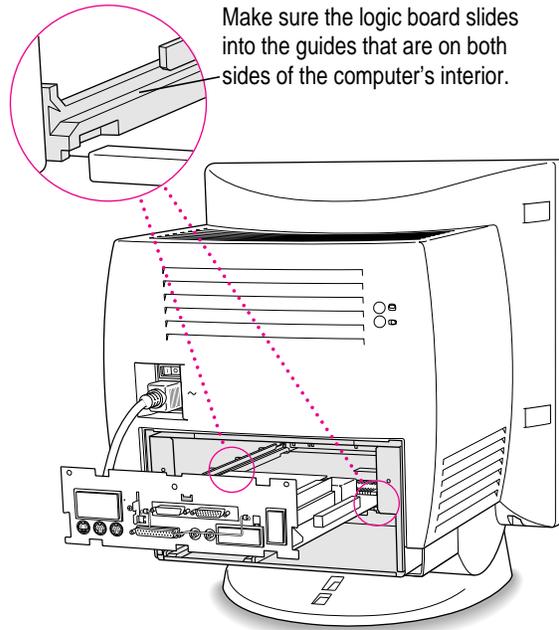
- 6** Make sure the folded cable lies flat along the top of the card.

If necessary, pinch the folds in the cable more to flatten the folded cable.



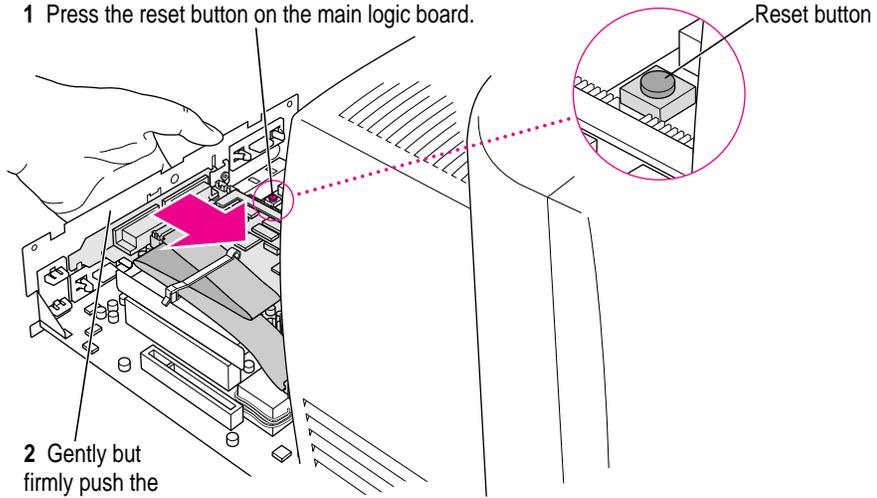
## Closing the computer

- 1 Slip the base of the logic board into the guide rails inside the computer case.



- 2 Press the reset button on the logic board, and slide the logic board back into the computer.**

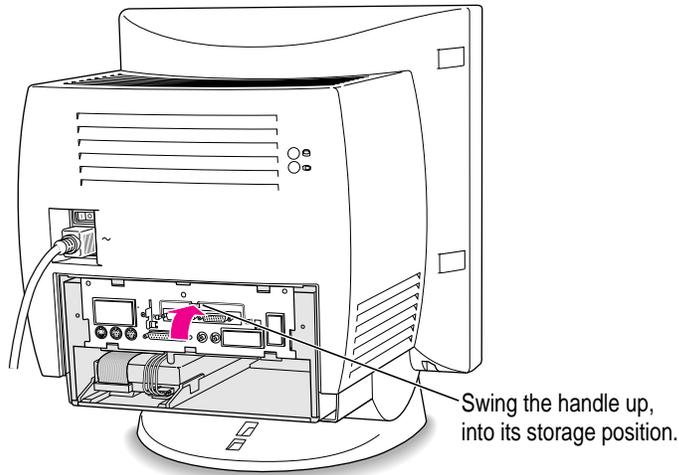
1 Press the reset button on the main logic board.



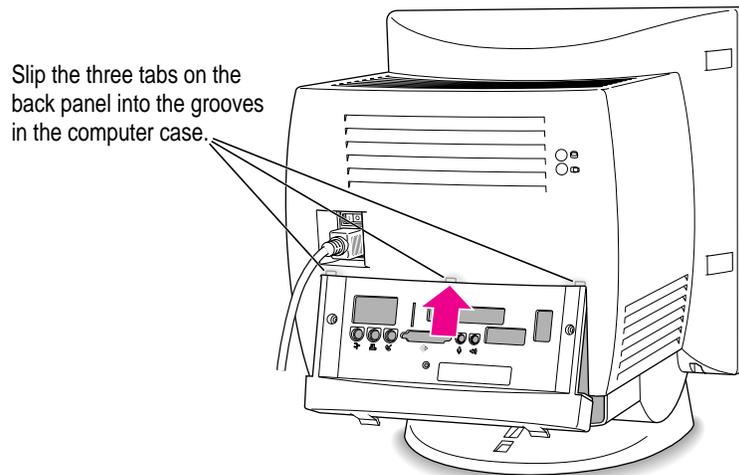
2 Gently but firmly push the vertical plate until the logic board is solidly back in place.

*Note:* When you press the reset button, some of your computer's software settings will change. You may want to open the control panels for the date and time, keyboard, and mouse to make sure that they are set the way you want them. For more information about working with control panels, see Macintosh Guide, the on-screen help that's available in the Guide (📖) menu.

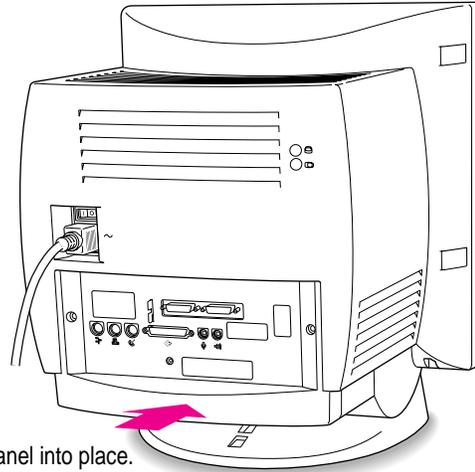
- 3** Swing the wire handle back into its storage position.



- 4** Slip the three tabs at the top of the back panel into the grooves in the computer case.

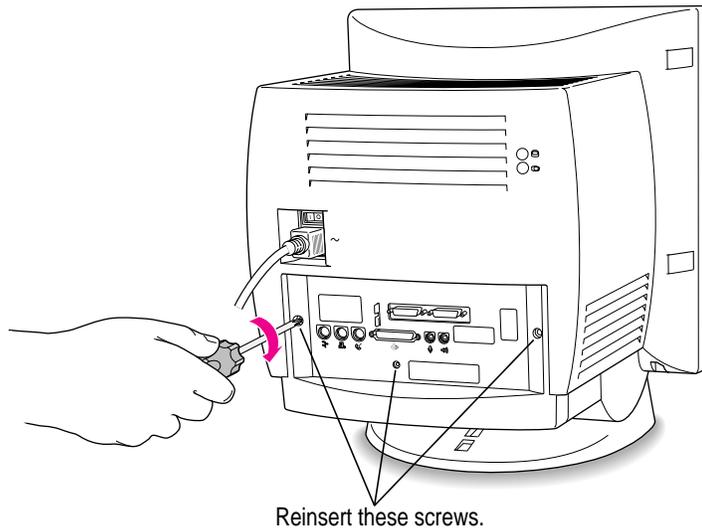


- 5 Snap the base of the back panel into place.**



Snap the plastic back panel into place.

- 6 Reinsert the three security screws.**



Reinsert these screws.

## 7 Plug the cables back into the computer.

You are now finished installing the card.

*Reminder:* When you turn on your computer, don't forget to open the control panels for the date and time, keyboard, and mouse to make sure that they are set the way you want them. (Pressing the reset button on the logic board changed these settings.) For more information about working with control panels, see Macintosh Guide, the on-screen help that's available in the Guide (Ⓜ) menu.

## Connecting another monitor to a 5400 series Macintosh computer

You can display both the PC environment and the Mac OS environment on the monitor that is built in to a 5400 series Macintosh computer. You can also connect another monitor to display both environments simultaneously.

If you connect another monitor, you see the Mac OS environment on the built-in monitor and the PC environment on the other one. You can connect any Macintosh- or PC-compatible monitor (with the proper cable adapter, available from your monitor vendor or Apple-authorized dealer or service provider).

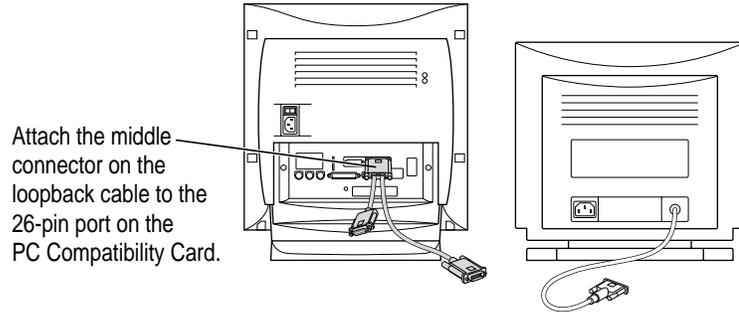
To connect another monitor, plug the middle connector on the loopback cable into the port on the PC Compatibility Card. Then connect the monitor cable to the short end of the loopback cable.

*Note:* If you want to use a multiple-scan monitor from a manufacturer other than Apple to display the PC environment, you also need to use a VGA-to-Macintosh adapter (available from your computer vendor). Connect this adapter between the monitor's cable and the loopback cable.

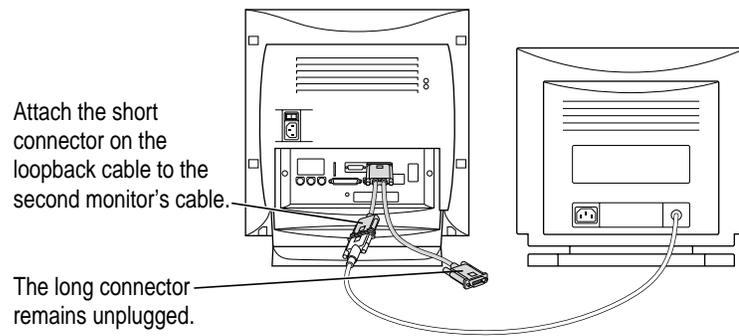
**WARNING** Do not plug a monitor into the joystick port that comes on some models of the PC Compatibility Card, and do not plug a joystick into a monitor port (marked with the icon ). Serious damage can result to your equipment.

To connect another monitor, follow these two steps:

- 1 Plug the middle connector on the loopback cable into the monitor port on the PC Compatibility Card and tighten the thumbscrews.**



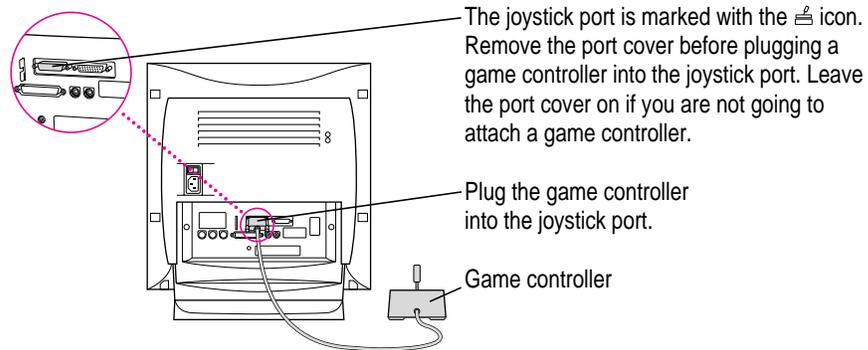
- 2 Plug the connector on the short end of the cable into the cable for the monitor that you want to use with the PC environment.**



The long connector is only used with other computer models, and should remain unplugged.

## Connecting a PC game controller

Some models of the PC Compatibility Card come with a game controller port. To connect a PC game controller, such as a joystick, remove the plastic cover on the game controller port; then plug your game controller into the port.



**WARNING** Do not plug a monitor into the joystick port, and do not plug a joystick into a monitor port (marked with the icon ). Serious damage can result to your equipment.

## What's next?

Go next to Chapters 4 through 7 of the *PC Compatibility Card User's Manual* for instructions on installing and using your software.

For information on connecting a mouse, printer, MIDI device, modem or other serial device, or connecting to a network, see Chapter 3, "Connecting Monitors and Other Equipment," in the *PC Compatibility Card User's Manual*.

# 2

## Installing the PC Compatibility Card in a 6400 Series Macintosh Computer

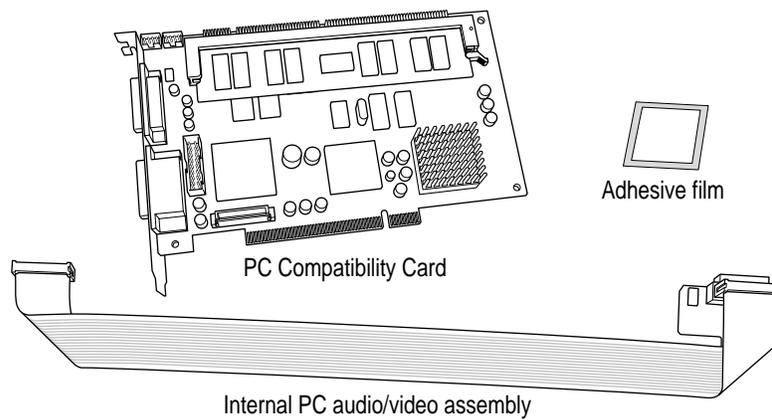


This chapter describes how to install the PC Compatibility Card hardware in a 6400 series Macintosh computer, such as the Macintosh Performa 6400 or the Power Macintosh 6400.

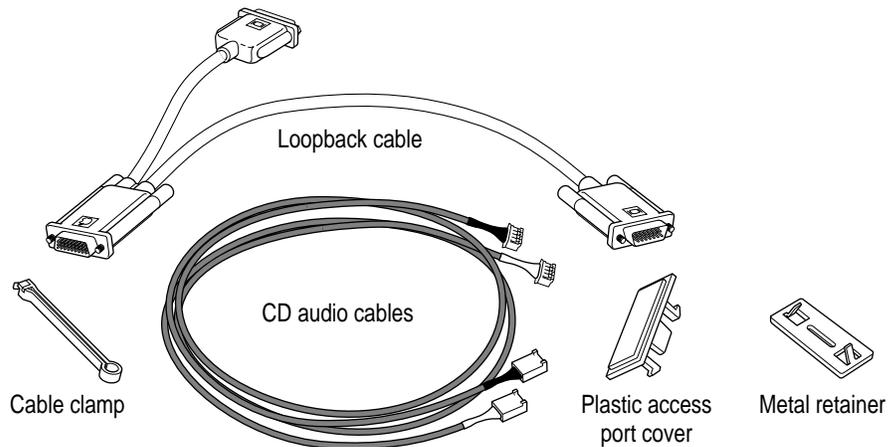
**IMPORTANT** If you received this manual with a computer, the PC Compatibility Card hardware is already installed. Skip ahead to the section “Connecting Monitors and Other Equipment” later in this chapter. If you want to install additional memory on your card, see the *PC Compatibility Card User’s Manual*.

## What you need

Before beginning the installation process, make sure you have all the parts and tools that are necessary to install the card in your computer. To install the card in a 6400 series Macintosh computer, you need the PC Compatibility Card, the internal PC audio/video assembly, and the adhesive film. You also need a Phillips screwdriver.



You won't need the cable clamp, the CD audio cables, the plastic access port cover, or the metal retainer shown below. Also, the loopback cable is only necessary if you plan to attach two monitors to your computer.



## Installing the PC Compatibility Card hardware

There are several steps to installing your PC Compatibility Card hardware:

- opening the computer
- temporarily removing the video input card if there is one installed
- installing the internal PC audio/video assembly
- installing the card
- closing the computer

### Opening the computer

**IMPORTANT** To avoid generating static electricity (from your body) that may damage components, do not walk around the room until you have completed the installation of the card and closed the computer. Additionally, move the logic board as little as possible while it is outside the computer case.

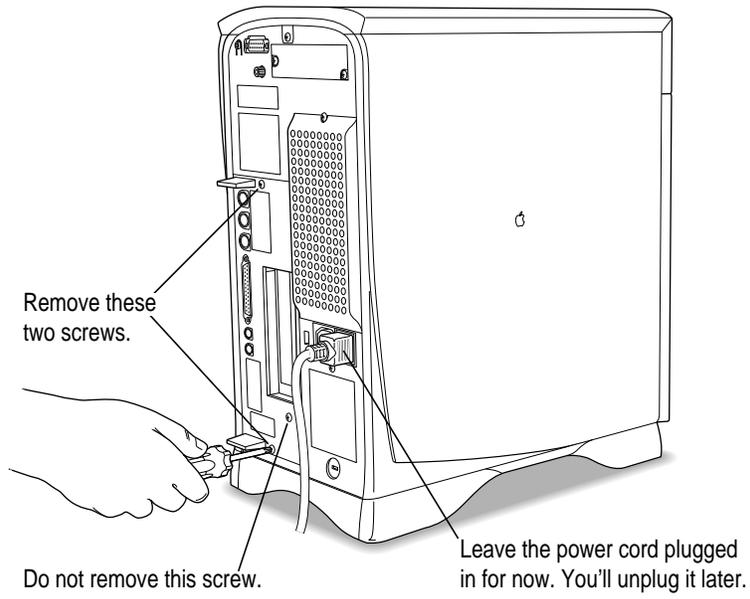
- 1 Shut down your computer by choosing Shut Down from the Special menu.**

You can also press the Power key (marked with a  $\triangleleft$ ) on the keyboard.

- 2 Unplug all the cables except the power cord from the computer (including the cable that connects your keyboard to the computer).**

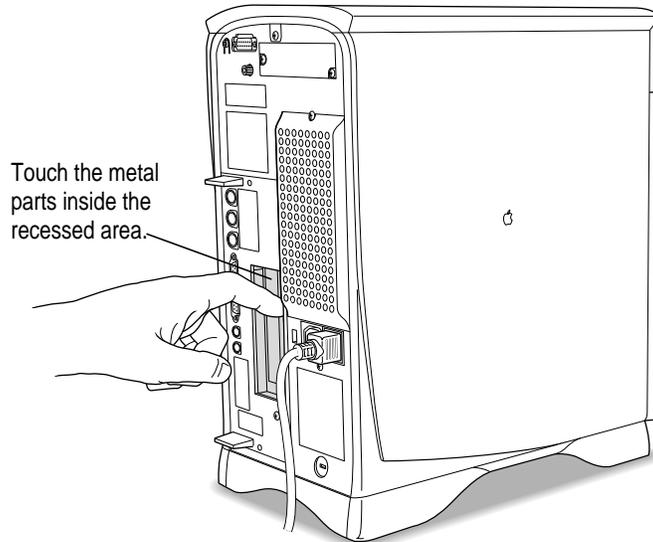
Leaving the power cord plugged in helps protect the computer from electrostatic discharge damage. You'll unplug the power cord later.

- 3 With a Phillips screwdriver, remove the two screws shown here from the computer's back panel.



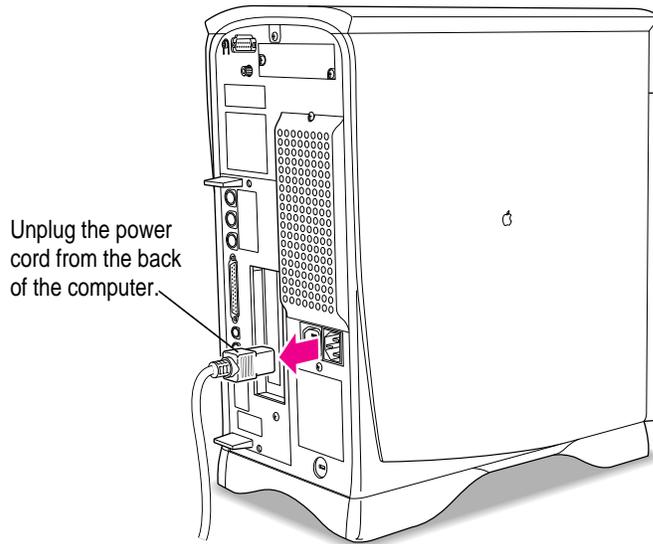
- 4 **Touch the recessed metal parts in the back panel to discharge static electricity from your body.**

Always do this before you touch any parts or install any components inside the computer. This discharges static electricity from your body and helps protect components inside the computer from being damaged.

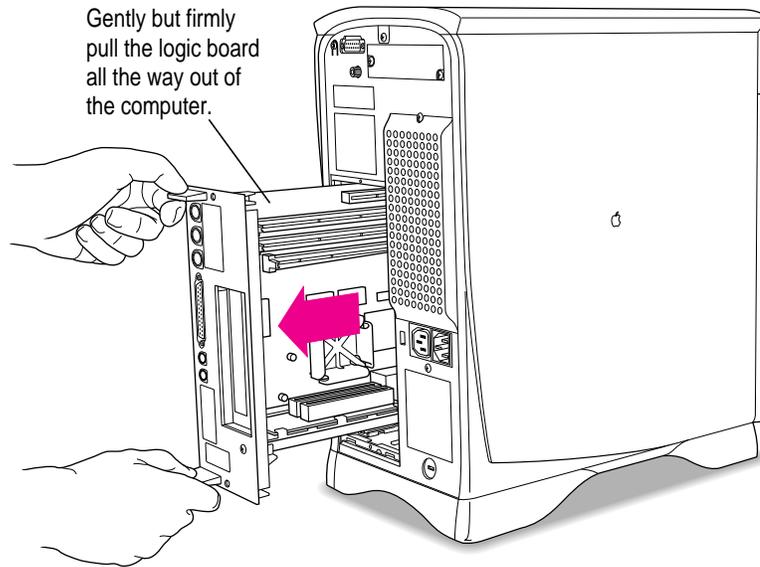


**5 Unplug the power cord from your computer.**

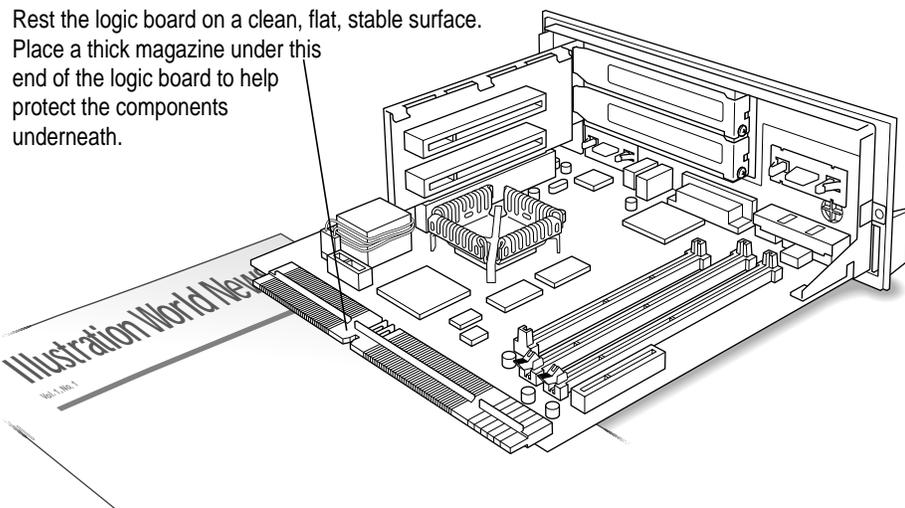
You can unplug the power cord now that you discharged static electricity in the previous step.



- 6** Grasping the two plastic tabs, gently pull the logic board all the way out of the computer.



- 7** Once the logic board is all the way out, set it on a clean, flat, stable surface. Rest the end of the board on a thick magazine or a thin book to protect the components underneath.

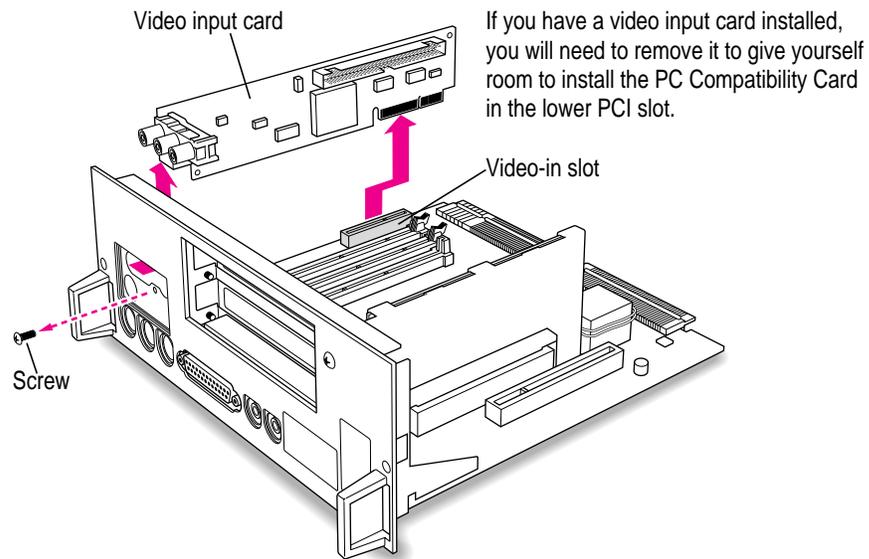


## Removing the video input card and the PCI port cover

If you have a video input card already installed, you need to remove it temporarily to give yourself more room while you install the PC Compatibility Card.

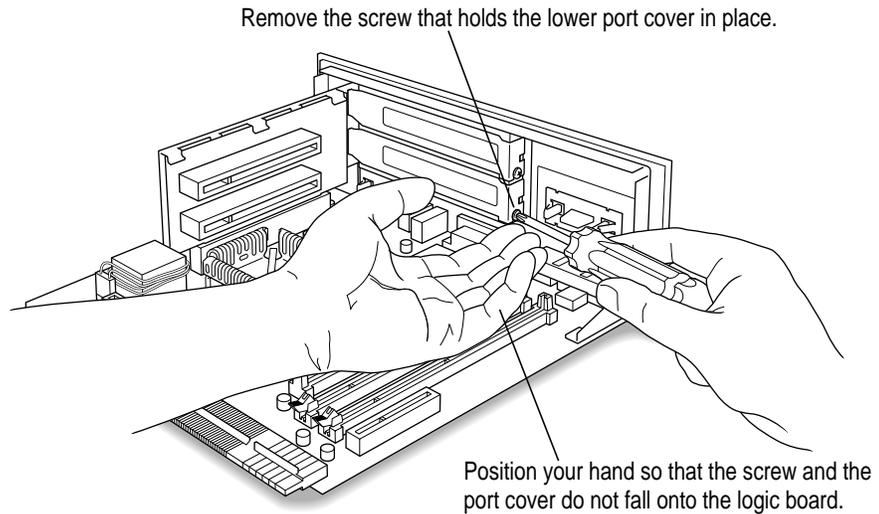
- 1** Unscrew the screw on the front of the vertical plate that holds the video input card in place, and remove the card as shown. (You'll reinstall the card later.)

Skip this step if there is not a video input card installed on your logic board.



- 2 Remove the screw that holds the lower port cover in place. Hold your finger under the screw to catch it and the port cover when they come loose.

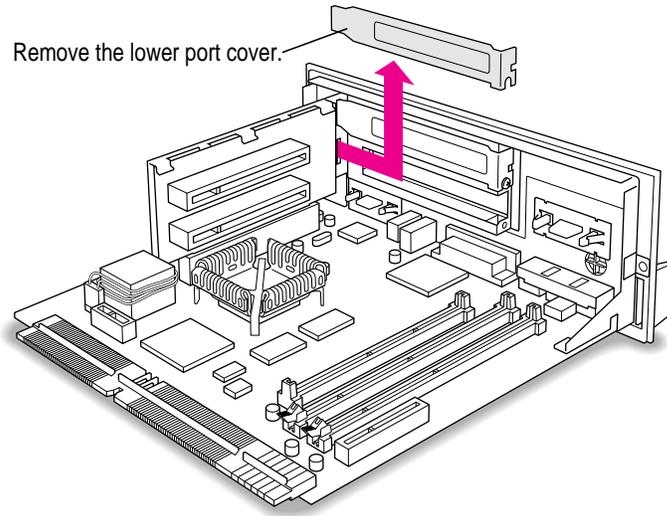
Try not to let the port cover or the screw fall onto the logic board.



**IMPORTANT** The PC Compatibility Card should only be installed in the bottom PCI slot. Be sure to remove the lower port cover, not the upper one. If you already have a PCI card installed in the bottom PCI slot, remove it now, and then reinstall it in the top slot after you have finished installing the PC Compatibility Card. For instructions on how to remove the PCI card, refer to the manual that came with the card.

**3 Remove the lower port cover and set it aside.**

You won't need the port cover for the rest of these instructions, but save it in case you ever remove the PC Compatibility Card and need to cover the port again.



**Installing the internal PC audio/video assembly**

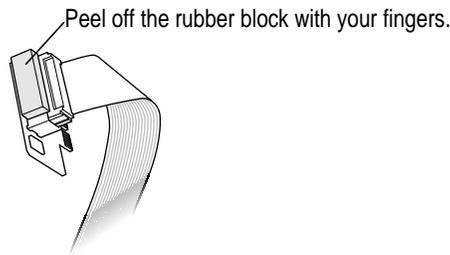
**1 Pick up the internal PC audio/video assembly, and unfold the two folds in the cable.**

Unfold the folds near each connector so that the cable is straight.



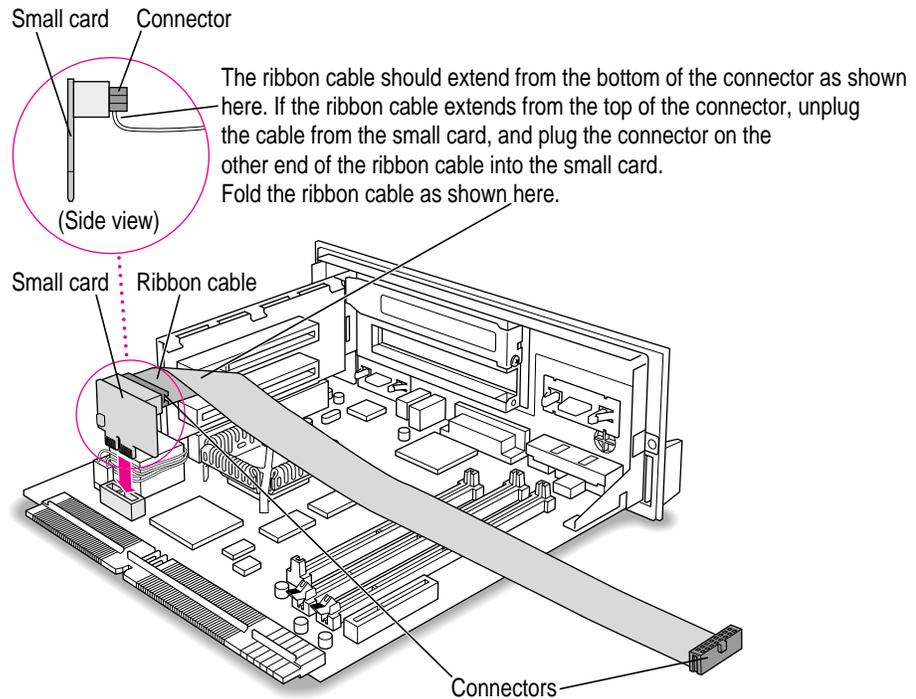
**2 Remove the rubber block from the large end of the internal PC audio/video assembly.**

The rubber block is glued to the top of the connector, but you can peel it off easily with your fingers. The rubber block must be removed for this installation.



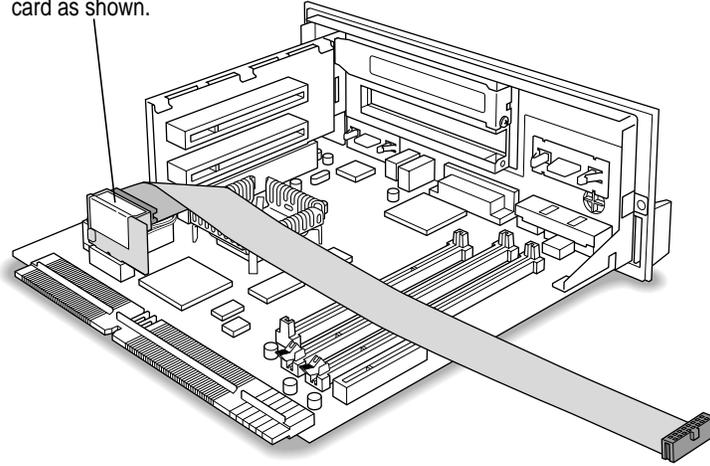
**3 Plug the large end of the internal PC audio/video connector into the socket on the computer's main logic board, and fold the cable near the connector as shown in the illustration below.**

Pinch the fold in the cable so that the cable lies flat.



- 4 **Peel the adhesive film off of its backing, and apply it to the top of the connector, as shown below.**

Apply the adhesive film to the small card as shown.



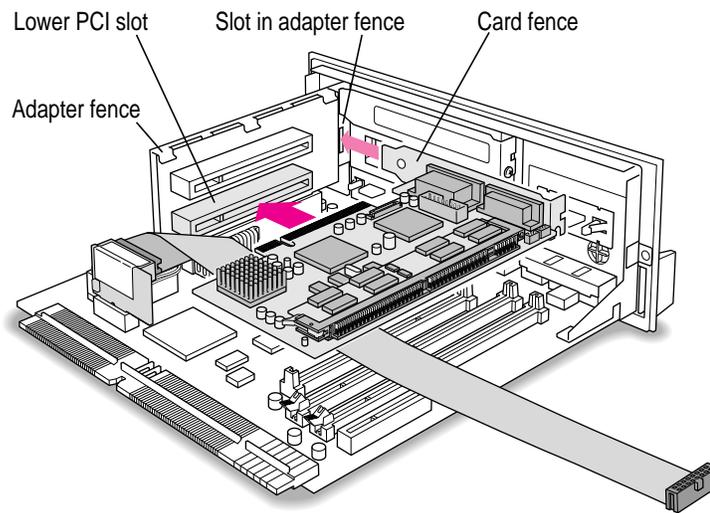
## Installing the card

- 1 Remove the PC Compatibility Card from its static-proof bag.

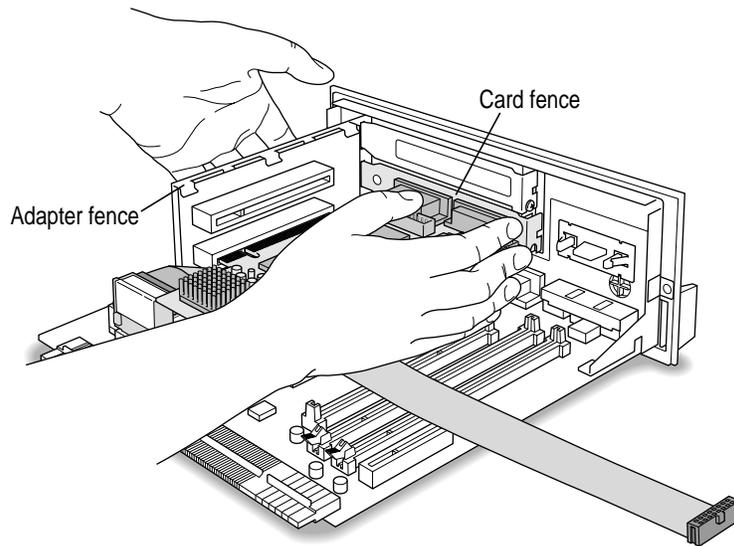
Hold the card by its edges to avoid touching the components on the card.

- 2 Insert the card into the lower PCI slot. Make sure the PC audio/video assembly cable lies underneath the card, and that the card fence matches up to the opening where the port cover was.

The card fence should slide through the slot in the adapter fence.

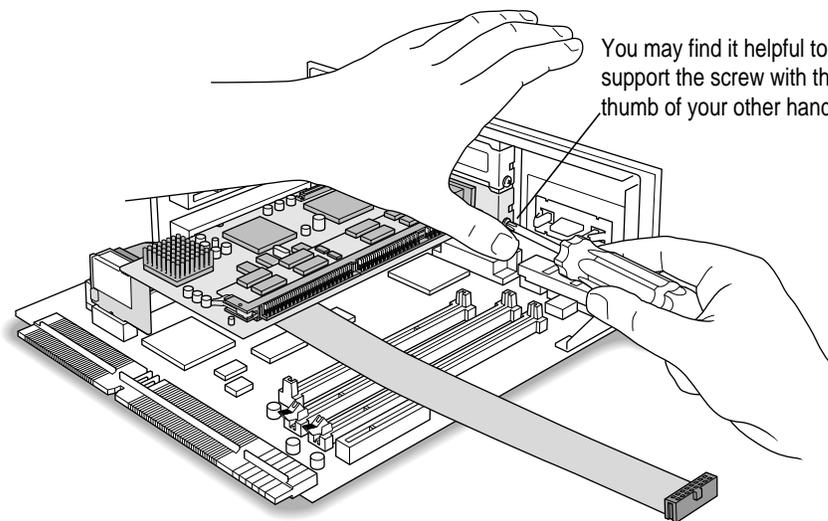


- 3** While supporting the adapter fence with one hand, push the card until it snaps into place. Don't force the card. If you meet resistance, pull it out and try again.

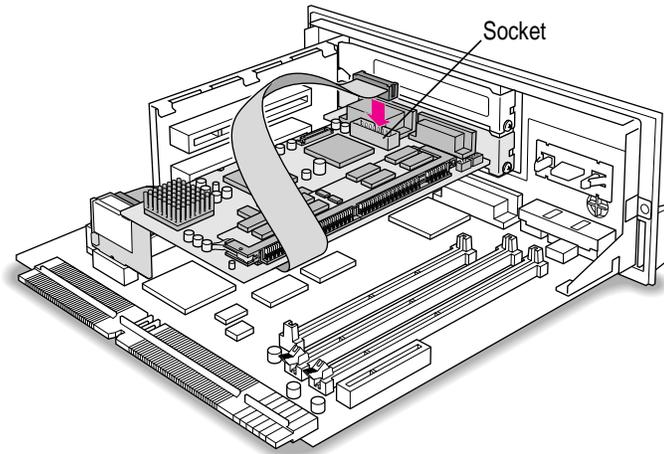


- 4** Reinsert the screw into the PC Compatibility card fence and screw it into place.

To help insert the screw, push the card fence forward with your thumb so the screw holes align. Insert the screw until it's somewhat steady, hold your thumb underneath it (to prevent it from falling), and use the screwdriver to tighten it.



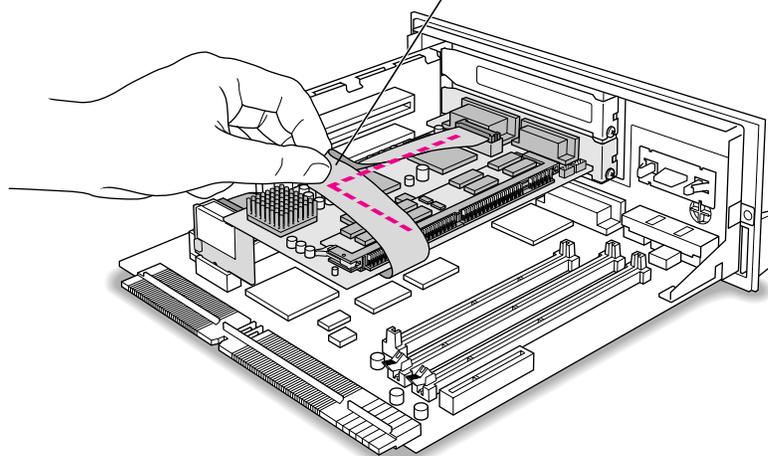
- 5 Insert the small end of the internal PC audio/video assembly into the socket in the corner of the PC Compatibility Card.



- 6 Fold the slack in the internal PC audio/video assembly into the shape of an L on top of the card. Firmly pinch the fold as shown below.

**IMPORTANT** Do not press down too hard on the top of the card. Applying excessive pressure to the card may damage the card and your logic board.

Fold the cable in an L shape and pinch it firmly here.

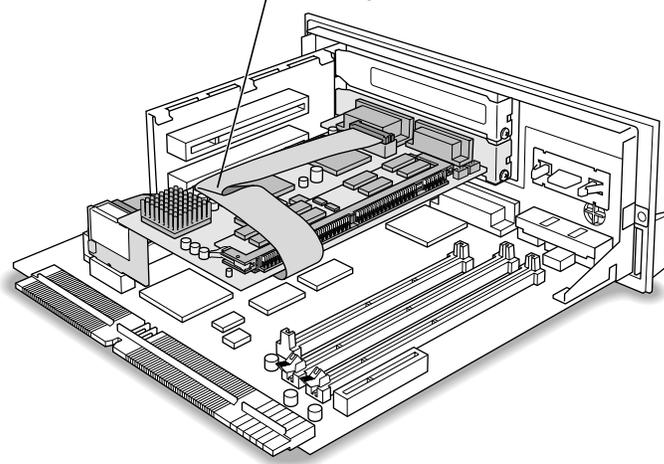


- 7** Fold down the cable as shown below, so that the cable lies flat along the top of the card.

You should be able to pinch both folds between your thumb and forefinger so that the cable lies flat.

**IMPORTANT** Do not press down too hard on the top of the card. Applying excessive pressure to the card may damage the card and your logic board.

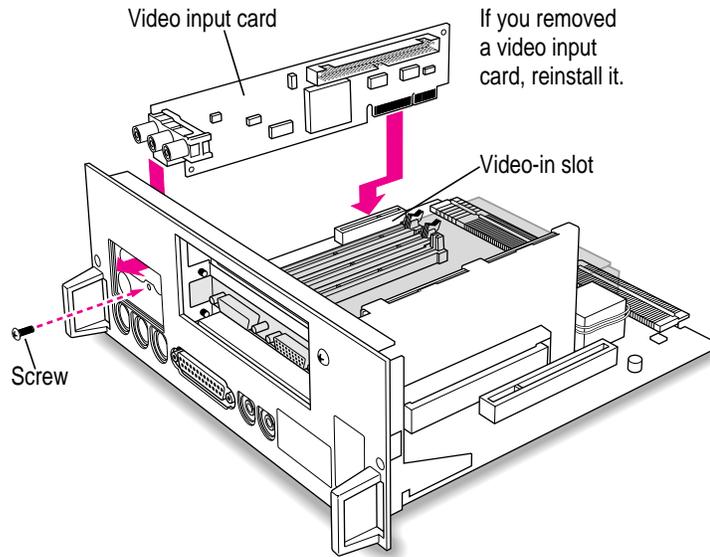
Fold down the cable so that it lies flat against the card.



- 8** If you removed a PCI card from the bottom PCI slot, reinstall it now in the top PCI slot.

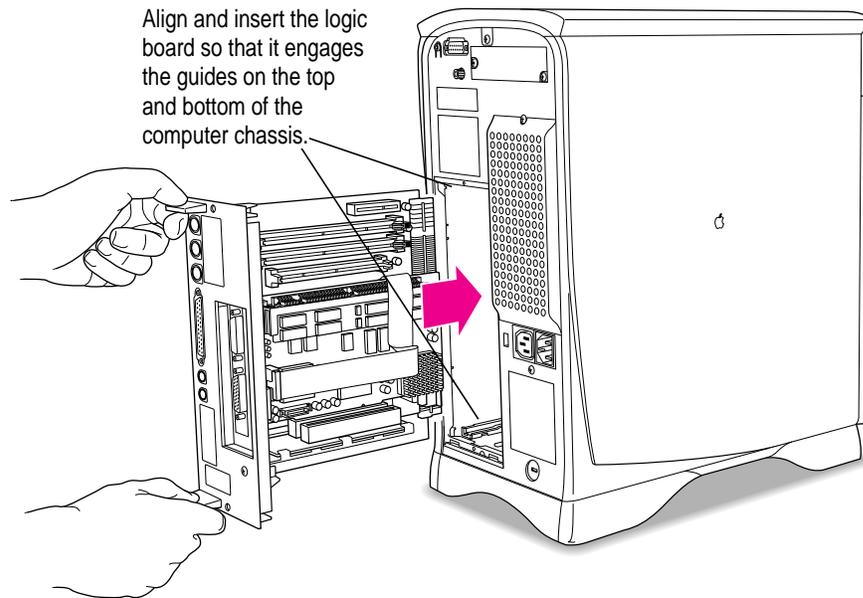
Remove the screw that holds the upper port cover in place, and remove the port cover. Then insert the PCI card into the top PCI slot. For detailed instructions, refer to the manual that came with the PCI card.

**9** If you removed a video input card from the logic board, reinsert it now.

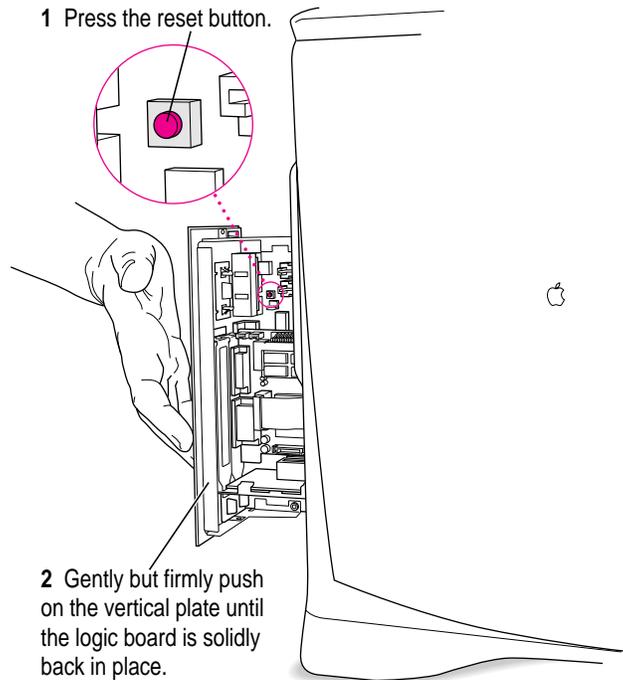


## Closing the computer

- 1 Grasping the plastic tabs on the vertical plate, orient the logic board vertically and slide it into the guide rails on the left inside of the computer.

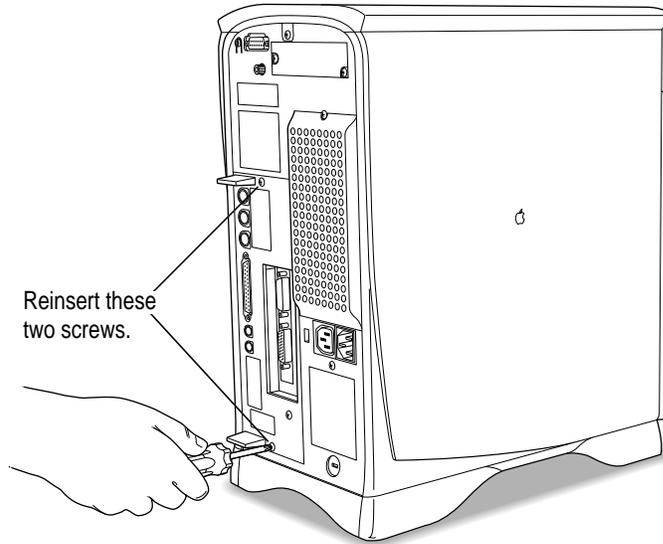


- 2 Press the reset button on the logic board, and slide the logic board back into the computer until it snaps into place.

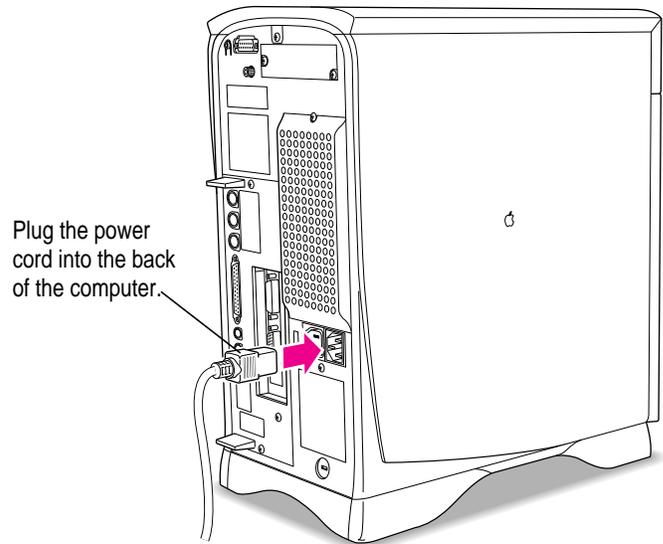


*Note:* When you press the reset button, some of your computer's software settings will change. After you finish this installation and turn on your computer, you may want to open the control panels for the date and time, keyboard, and mouse to make sure that they are set the way you want. For more information about working with control panels, see the information about customizing your computer in Macintosh Guide, available in the Guide (📖) menu.

**3 Reinsert the two screws.**



**4 Reconnect the power cord.**



**5 Reconnect the other cables (except those for your monitor) back into the computer.**

For information about properly connecting one or more monitors, see the next section, “Connecting Monitors and Other Equipment.”

You are now finished installing the card.

*Reminder:* When you turn on your computer, don’t forget to open the control panels for the date and time, keyboard, and mouse to make sure that they are set the way you want them. (Pressing the reset button on the logic board changed these settings.) For more information about working with control panels, see the information about customizing your computer in Macintosh Guide, the on-screen help that’s available in the Guide (⌘) menu.

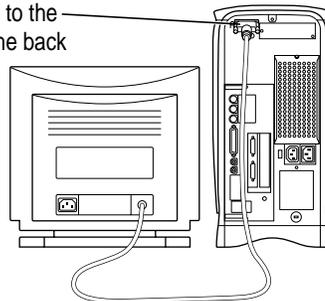
## Connecting monitors and other equipment

You can use a single monitor to display both the PC environment and the Mac OS environment, or you can simultaneously display both environments on two monitors.

### Connecting a single monitor

If you’re using a single monitor with your Macintosh computer, simply connect it to the computer’s built-in monitor port.

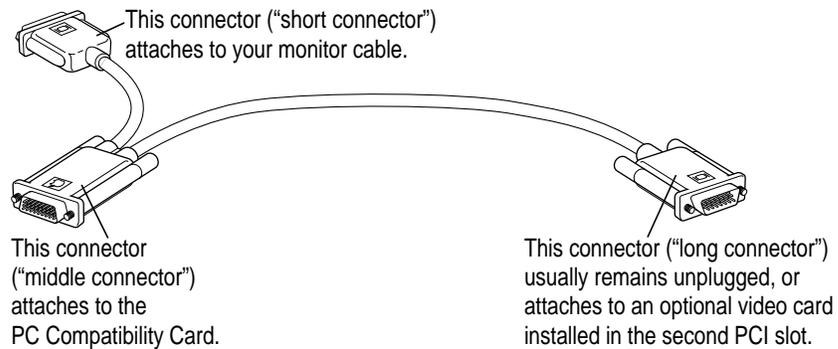
Attach the monitor cable to the built-in monitor port on the back of your computer.



## Connecting two monitors

If you connect two monitors, you see the Mac OS environment on one and the PC environment on the other. You can use any combination of Macintosh- and/or PC-compatible monitors (with the proper cable adapters, available from your monitor vendor or Apple-authorized dealer or service provider).

To use two monitors, you connect one to your Macintosh built-in monitor port. Then you plug the middle connector on the loopback cable into the port on the PC Compatibility Card, and connect the second monitor to the short connector on the loopback cable.

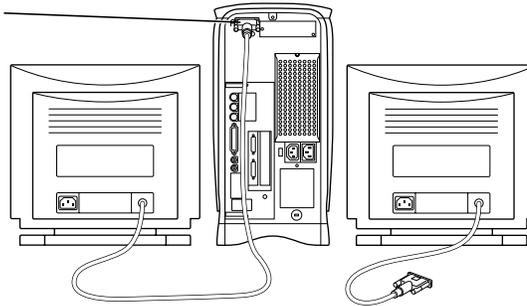


*Multiple-scan monitor:* If you want to use a multiple-scan monitor from a manufacturer other than Apple to display the PC environment, you also need to use a VGA-to-Macintosh adapter (available from your computer vendor). You connect this adapter between the monitor's cable and the short connector on the loopback cable.

To connect two monitors, follow these steps:

- 1** Connect the monitor you want to use for the Mac OS environment to the monitor port (I/O) on the back panel of your computer.

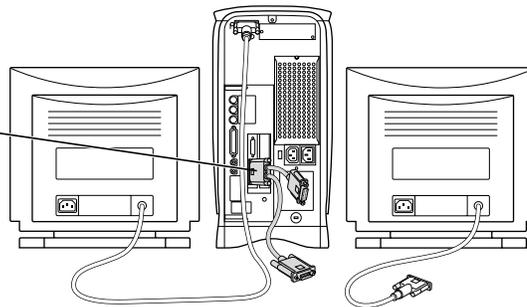
Attach the monitor cable to the built-in monitor port on the back of your computer (or a video card, if one is installed).



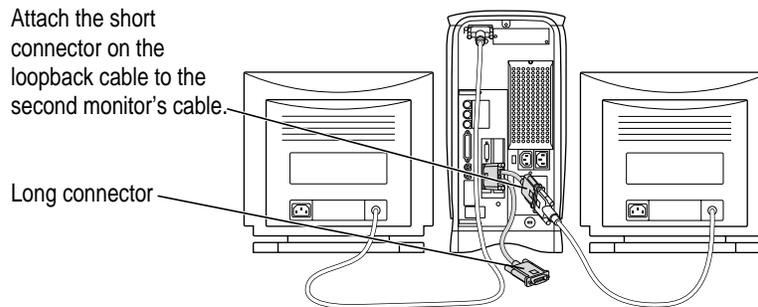
**WARNING** Do not plug a monitor into the joystick port that comes on some models of the PC Compatibility Card, and do not plug a joystick into a monitor port (marked with the icon I/O). Serious damage can result to your equipment.

- 2** Plug the middle connector on the loopback cable into the port on the PC Compatibility Card and tighten the thumbscrews.

Attach the middle connector on the loopback cable to the 26-pin port on the PC Compatibility Card.



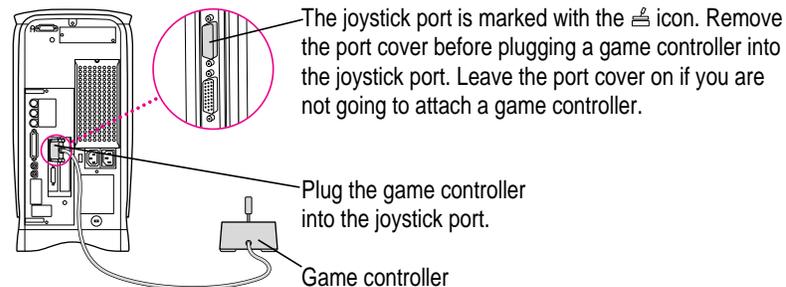
- 3 **Plug the connector on the short end of the cable into the cable for the monitor that you want to use with the PC environment.**



In most cases, you leave the long connector on the loopback cable unplugged. But if your computer has an additional video card installed in the second PCI slot, you can plug the long connector into it. This will allow you to switch the second monitor between the PC environment and the Mac OS environment.

### Connecting a PC game controller

Some models of the PC Compatibility Card come with a joystick port. To connect a PC game controller, such as a joystick, remove the plastic cover on the joystick port; then plug your game controller into the port.



**WARNING** Do not plug a monitor into the joystick port, and do not plug a joystick into a monitor port (marked with the icon ). Serious damage can result to your equipment.

## What's next?

Go next to Chapters 4 through 7 of the *PC Compatibility Card User's Manual* for instructions on installing and using your software.

For information on connecting a mouse, printer, MIDI device, modem or other serial device, or connecting to a network, see Chapter 3, "Connecting Monitors and Other Equipment," in the *PC Compatibility Card User's Manual*.

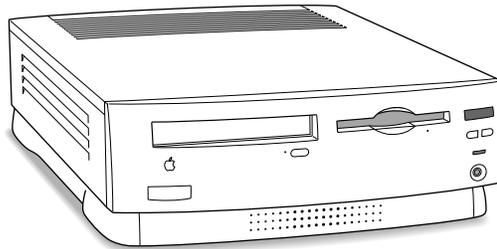


# 3

## Installing the PC Compatibility Card in a Modular Desktop Macintosh Computer



This chapter describes how to install the PC Compatibility Card hardware in a Macintosh computer that has a PCI expansion slot and looks like the illustration below.

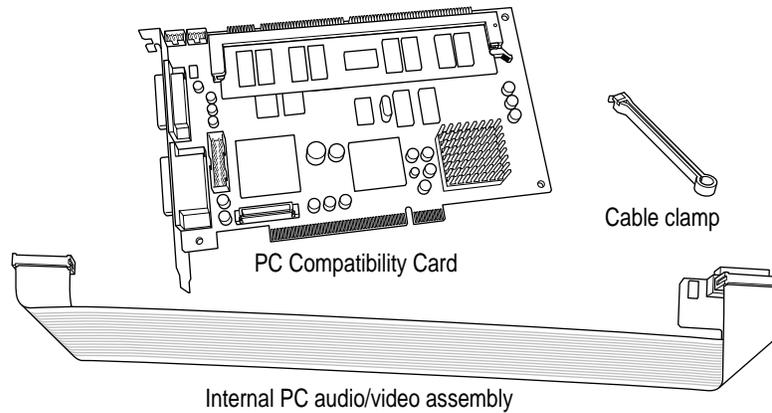


Some Macintosh models that look like this do not have a PCI expansion slot and are not compatible with the PC Compatibility Card. If you are not sure if your computer model has a PCI expansion slot, refer to the technical specifications that came with your computer.

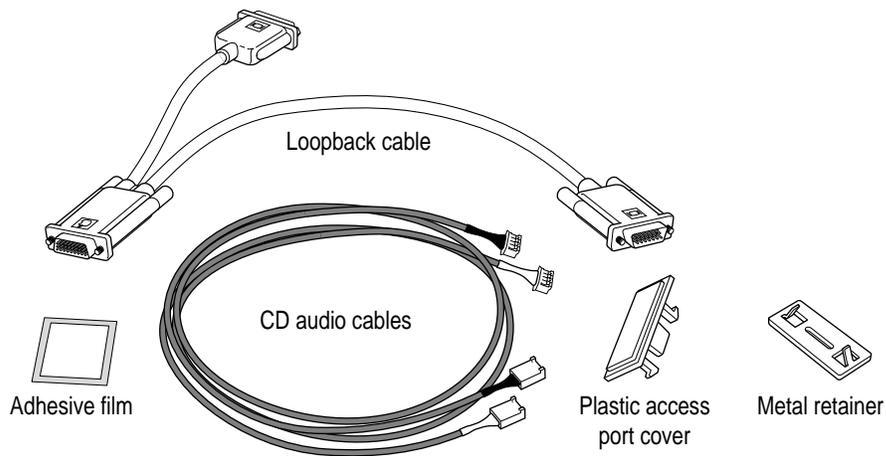
**IMPORTANT** If you received this manual with a computer, the PC Compatibility Card hardware is already installed. Skip ahead to “Connecting Monitors and Other Equipment” later in this chapter. If you want to install additional memory on your card, see the *PC Compatibility Card User’s Manual*.

## What you need

Before beginning the installation, make sure you have all the necessary parts and tools. You need the PC Compatibility Card, the internal PC audio/video assembly, and the cable clamp. You also need a Phillips screwdriver.



You won't need the adhesive film, CD audio cables, plastic access port cover, or metal retainer shown below. Also, the loopback cable is only necessary if you plan to attach two monitors to your computer.



## Installing the PC Compatibility Card hardware

There are several steps to installing your PC Compatibility Card hardware:

- opening the computer
- installing the card
- installing the internal PC audio/video assembly
- closing the computer

### Opening the computer

**IMPORTANT** To avoid generating static electricity that may damage components, do not walk around the room until you have completed the installation of the expansion card or memory and closed the computer. Additionally, move the logic board as little as possible while it is outside the computer case.

- 1 Shut down your computer by choosing Shut Down from the Special menu.**

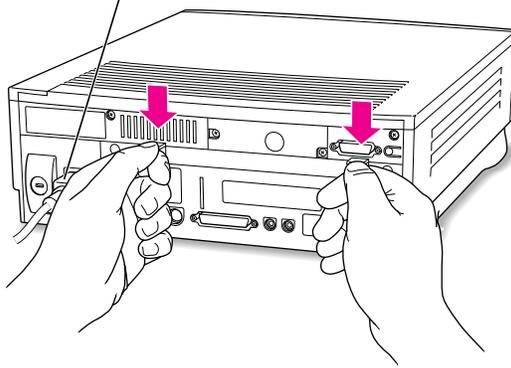
You can also press the Power key (marked with a  $\triangleleft$ ) on the keyboard.

- 2 Unplug all the cables except the power cord from the computer (including the cable that connects your keyboard to the computer).**

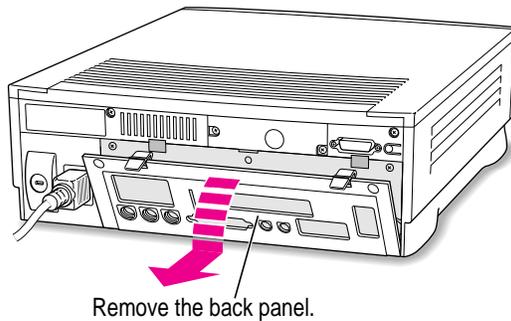
Leaving the power cord plugged in helps protect the computer from damage caused by electrostatic discharge. You'll unplug the power cord later.

- 3 Place your thumbs on the two tabs at the top of the computer's back panel, and press down.**

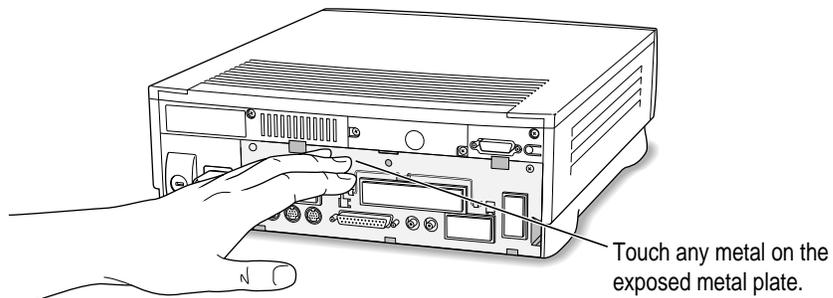
Leave the power cord plugged in for now. You'll unplug it later.



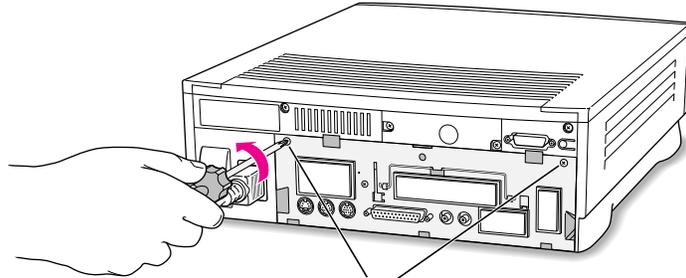
- 4 Pulling gently, swing the panel down, and slip it out.**



- 5 To discharge static electricity from your body that could damage the components inside, touch the metal vertical plate on the back of the computer.**

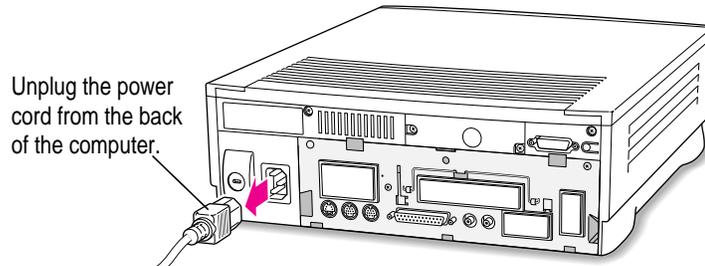


- 6** If there are security screws on the vertical plate on the back of the computer, remove them with a screwdriver.



If there are security screws, remove both screws from the vertical plate.

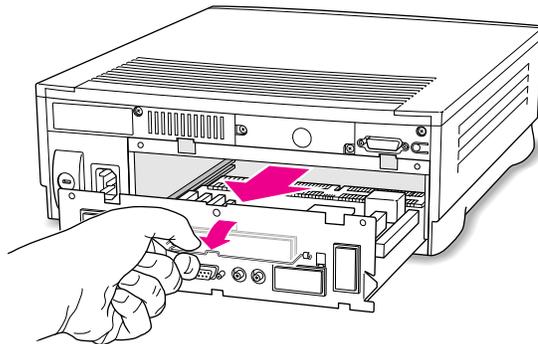
- 7** Unplug the power cord from your computer.



Unplug the power cord from the back of the computer.

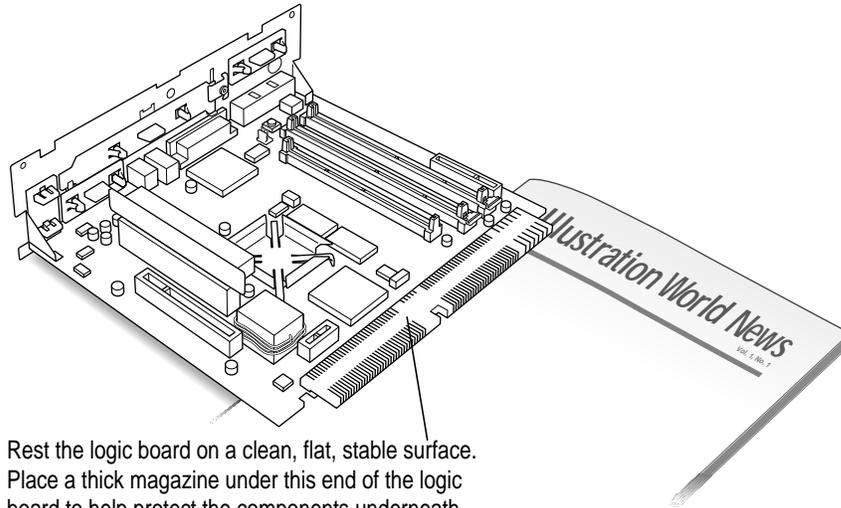
- 8** Gently pull down on the wire handle and swing it out to unlock it from its storage position. Then grasp the handle and gently pull the logic board out of the computer.

The vertical plate and the logic board to which it's attached slide all the way out of the computer.



- 9 Place the logic board on a stable, clean, flat surface, and use a thick magazine to prop up one end of the logic board as shown below.

The magazine helps protect the components on the bottom of the logic board during the installation.



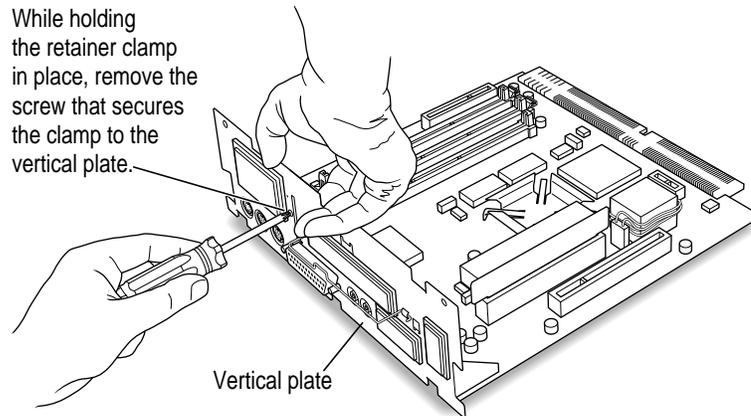
Rest the logic board on a clean, flat, stable surface. Place a thick magazine under this end of the logic board to help protect the components underneath.

## Installing the card

- 1 **Unscrew the retainer clamp screw from the front of the vertical plate, while holding in place the clamp on the back.**

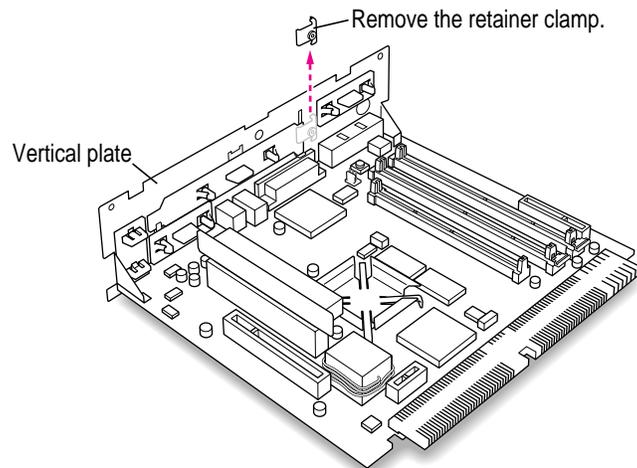
Avoid letting the retainer clamp fall onto the logic board.

While holding the retainer clamp in place, remove the screw that secures the clamp to the vertical plate.



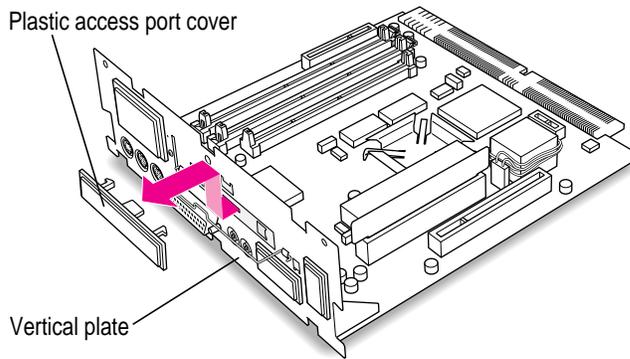
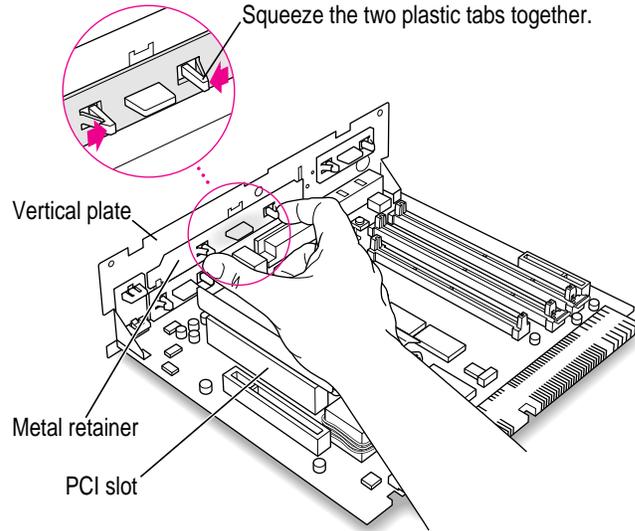
- 2 **Lift out the retainer clamp and set it aside.**

You'll need the retainer clamp later, after you install the card.

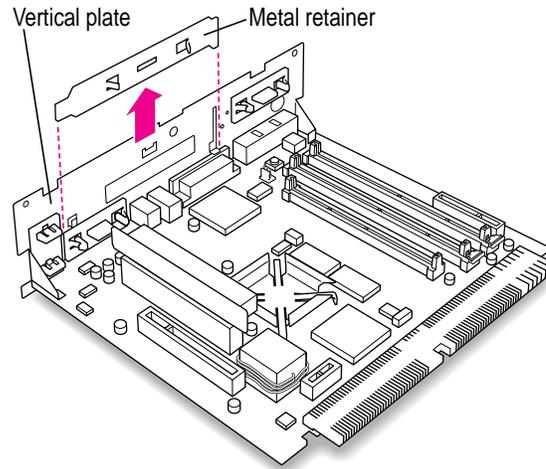


**3 Remove the plastic access port cover from the vertical plate.**

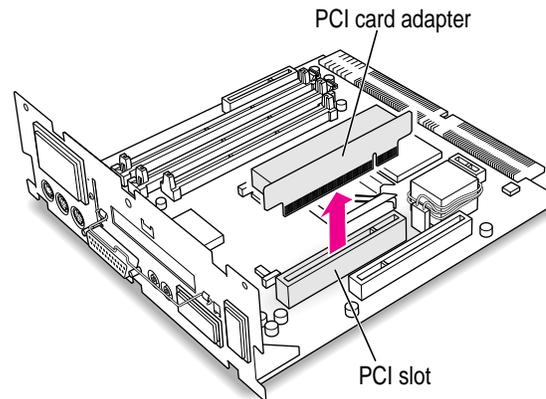
Squeeze together the two plastic tabs holding the access port cover in place; then pull the access port cover off from the outside.



- 4 Remove the metal retainer from the inside of the vertical plate.



- 5 Remove the PCI card adapter from the main logic board.



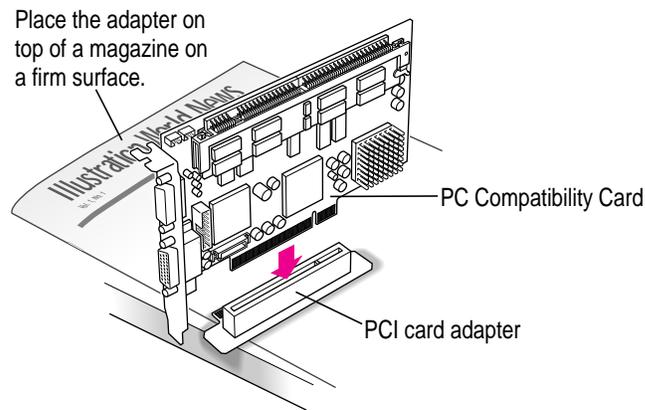
- 6 Remove the PC Compatibility Card from its static-proof bag.

Hold the card by its edges to avoid touching the components on the card.

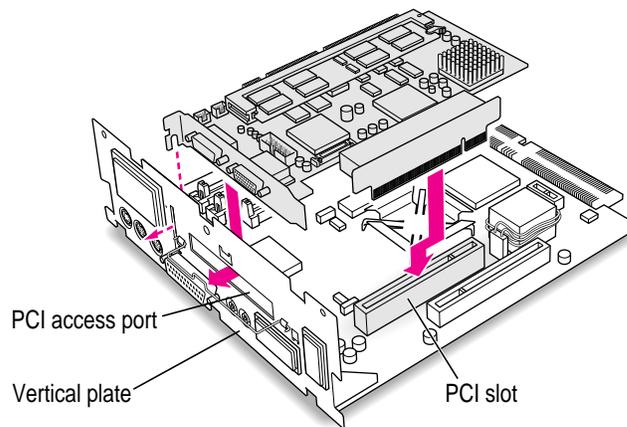
**7 Connect the PC Compatibility Card and the PCI card adapter.**

Place the adapter on top of a magazine on a firm surface. (Make sure the magazine is thick enough to protect your working surface from being scratched by the metal pins on the adapter.)

Press the card firmly into the adapter. You may find it helpful to place the card and the adapter near the edge of a table with the metal edge of the card hanging over the end of the table. In this position, you can easily insert the card completely into the adapter.

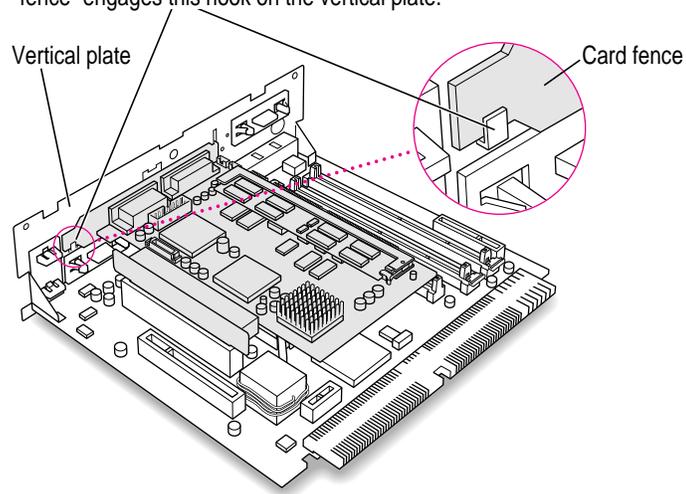


**8 Align the PC Compatibility Card and the adapter over the PCI slot.**



- 9 **Insert the adapter into the PCI slot on the main logic board. Make sure the metal fence on the PC Compatibility Card engages the hook on the vertical plate and that the connectors on the card protrude through the PCI access port opening.**

The card is properly seated when the card's metal "fence" engages this hook on the vertical plate.

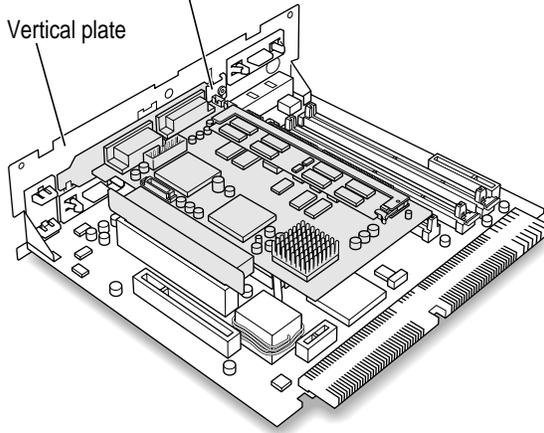


If you meet resistance, pull the adapter out and try again. To see if the adapter is properly connected, lift it gently. If it resists and stays in place, it's connected.

- 10** Insert the retainer clamp back into the hole and hold it there while you screw it into place.

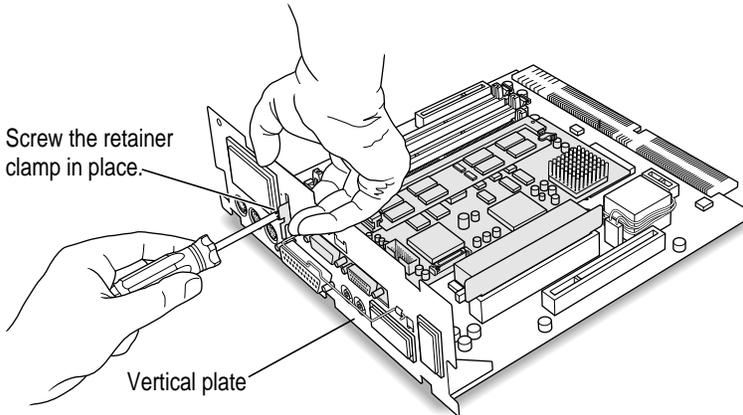
Replace the retainer clamp.

Vertical plate



Screw the retainer clamp in place.

Vertical plate



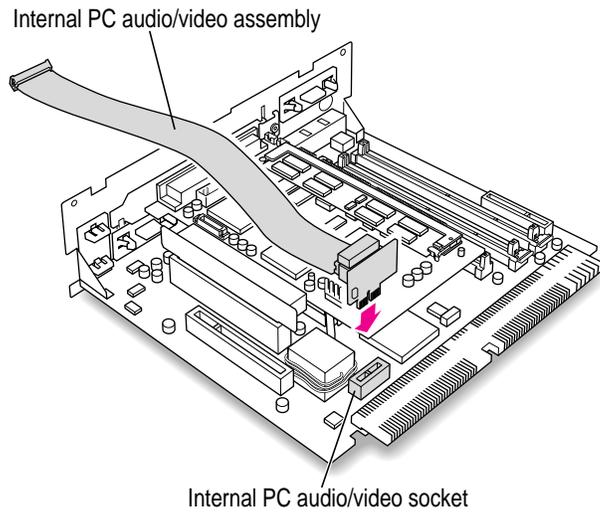
## Installing the internal PC audio/video assembly

- 1 Pick up the internal PC audio/video assembly, and unfold the two folds in the cable.

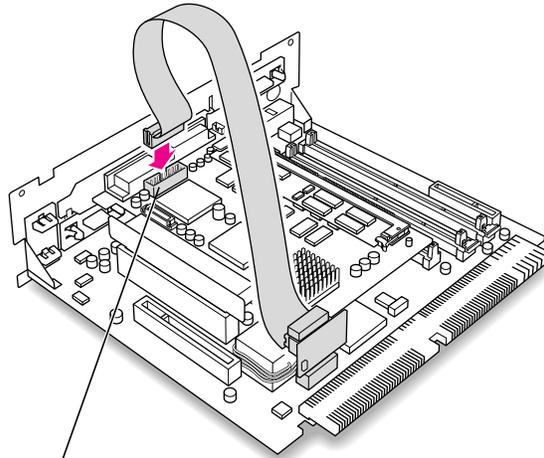
Unfold the folds near each connector so that the cable is straight.



- 2 Plug the large end of the internal PC audio/video connector into the socket on the computer's main logic board.



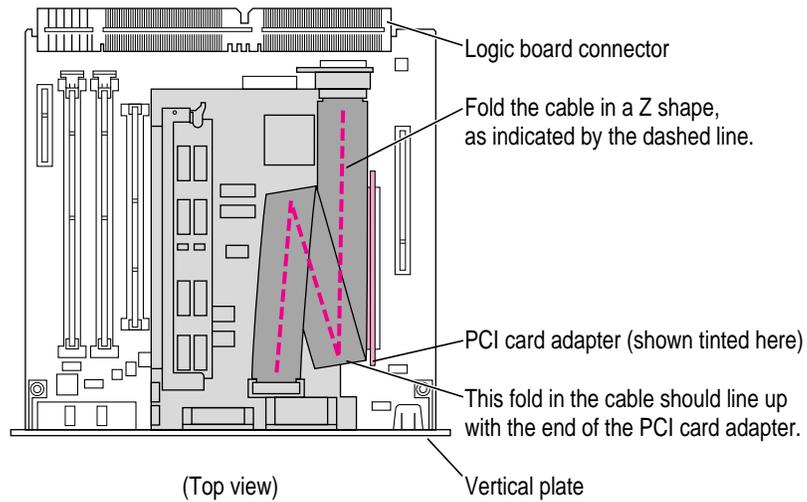
- 3 Insert the small end of the internal PC audio/video assembly into the socket in the corner of the PC Compatibility Card.



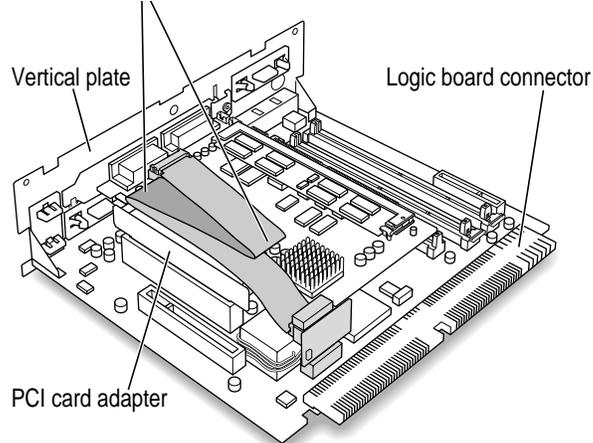
Internal PC audio/video socket

- 4 **Fold the slack in the internal PC audio/video assembly cable into the shape of a Z on top of the card. Firmly pinch the two new folds so that the cable lies flat along the top of the card.**

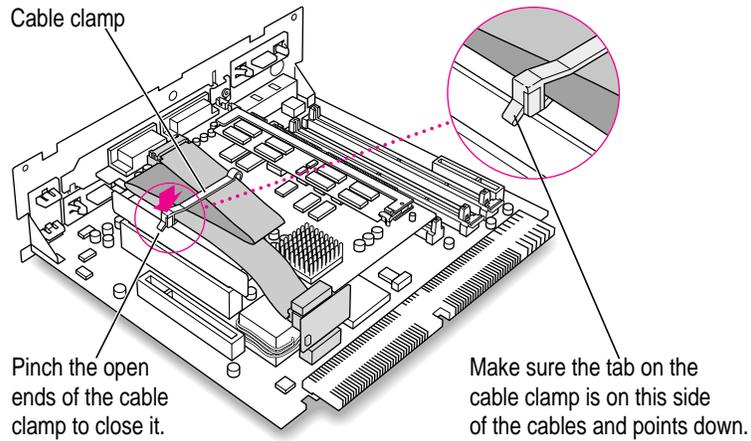
**IMPORTANT** Do not press down too hard on the top of the card. Applying excessive pressure to the card may damage the card and your logic board. Once you have folded the slack in the cable into a loose Z shape on top of the card, firmly pinch the new folds in the cable so that it lies flat.



Pinch these two new folds in the cable so that it lies flat.

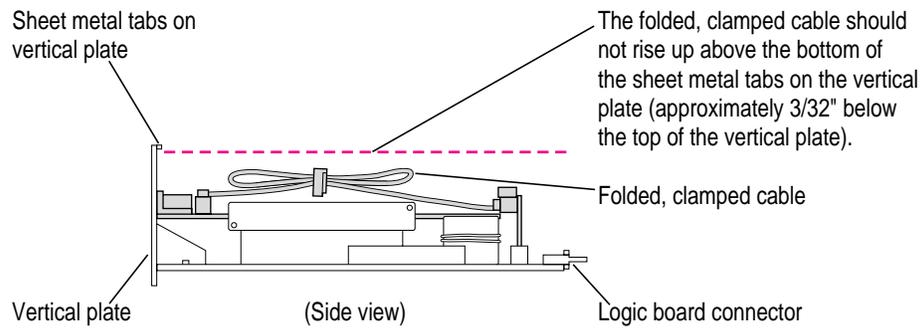


- 5** Slip the cable clamp over the three folds in the internal PC audio/video assembly cable. Then pinch the open ends of the cable clamp to close it and hold the folds in place.



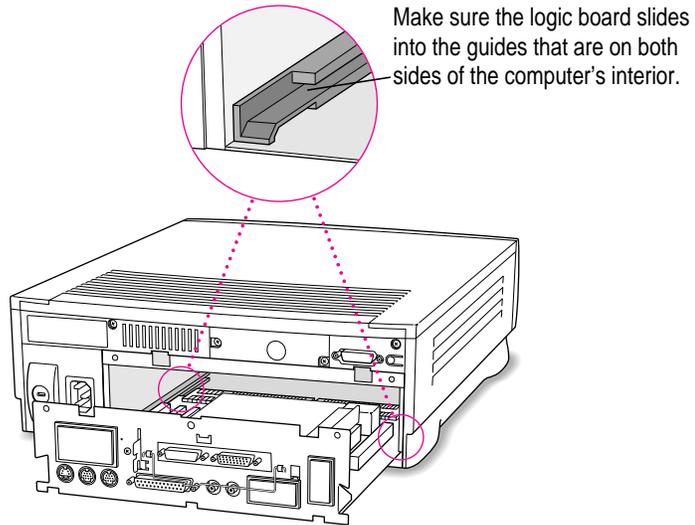
- 6** Make sure the folded cable lies flat along the top of the card.

If necessary, pinch the folds in the cable more to flatten the folded cable.



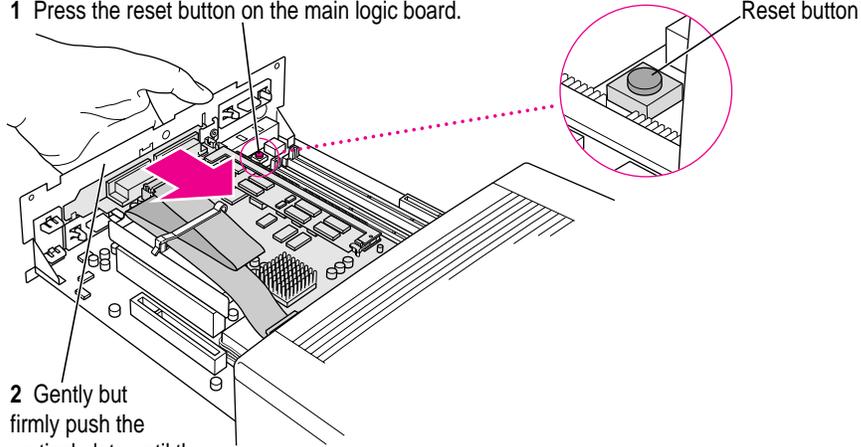
## Closing the computer

- 1 Slip the base of the logic board into the guide rails inside the computer's case.



**2 Press the reset button, and slide the logic board back into the computer.**

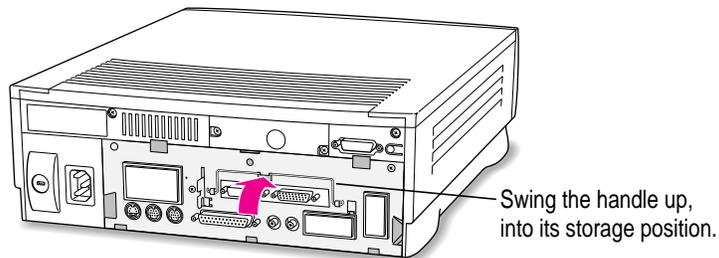
1 Press the reset button on the main logic board.



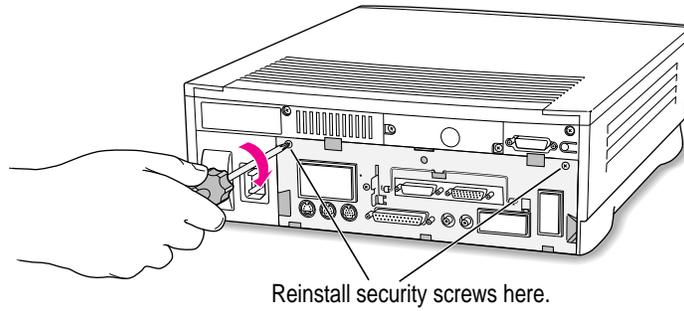
2 Gently but firmly push the vertical plate until the logic board is solidly back in place.

*Note:* When you press the reset button, some of your computer's software settings will change. You may want to open the control panels for the date and time, keyboard, and mouse to make sure that they are set the way you want them. For more information about working with control panels, see the information about customizing your computer in Macintosh Guide, the on-screen help that's available in the Guide (📖) menu.

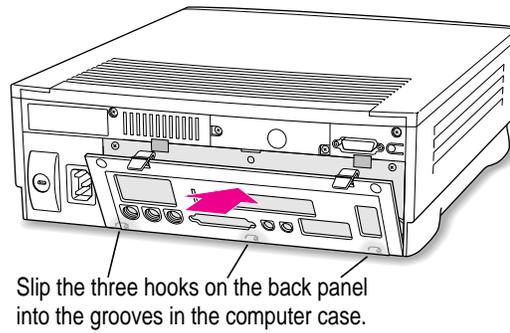
**3 Swing the wire handle back into its storage position.**



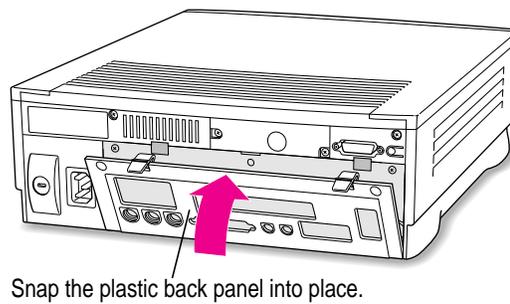
- 4** If you removed security screws earlier, reinstall them now.



- 5** Slip the three hooks at the base of the back panel into the grooves on the computer case.



- 6** Swing the back panel up and snap it into place.



## 7 Plug the cables back into the computer, and reconnect the power cord.

Your computer is now ready to turn on and use.

**WARNING** Never turn on your computer unless all of its internal and external parts are in place. Operating the computer when it is open or missing parts can be dangerous, and can damage your computer.

*Reminder:* When you turn on your computer, don't forget to open the control panels for the date and time, keyboard, and mouse to make sure that they are set the way you want them. (Pressing the reset button on the logic board changed these settings.) For more information about working with control panels, see the information about customizing your computer in Macintosh Guide, the on-screen help that's available in the Guide (🔗) menu.

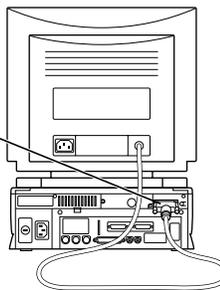
## Connecting monitors and other equipment

You can use a single monitor to display both the PC environment and the Mac OS environment, or you can simultaneously display both environments on two monitors.

### Connecting a single monitor

If you're using a single monitor with your Macintosh, simply connect it to the computer's built-in monitor port.

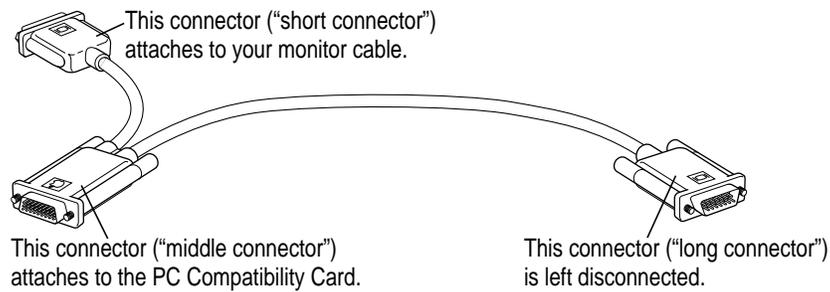
Attach the monitor cable to the built-in monitor port on the back of your computer.



## Connecting two monitors

If you connect two monitors, you see the Mac OS environment on one and the PC environment on the other. You can use any combination of Macintosh- and/or PC-compatible monitors (with the proper cable adapters, available from your monitor vendor or Apple-authorized dealer or service provider).

To use two monitors, you connect one to your Macintosh built-in monitor port. Then you plug the middle connector on the loopback cable into the port on the PC Compatibility Card, and connect the second monitor to the short connector on the loopback cable.

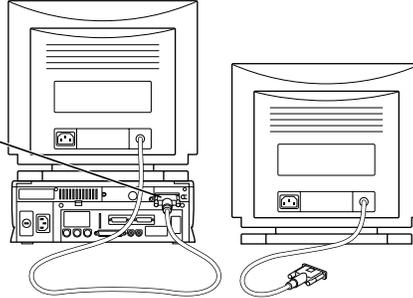


*Multiple-scan monitor:* If you want to use a multiple-scan monitor from a manufacturer other than Apple to display the PC environment, you also need to use a VGA-to-Macintosh adapter (available from your computer vendor). You connect this adapter between the monitor's cable and the short connector on the loopback cable.

To connect two monitors, follow these steps:

- 1 **Connect the monitor you want to use for the Mac OS environment to the monitor port (I/O) on the back panel of your computer.**

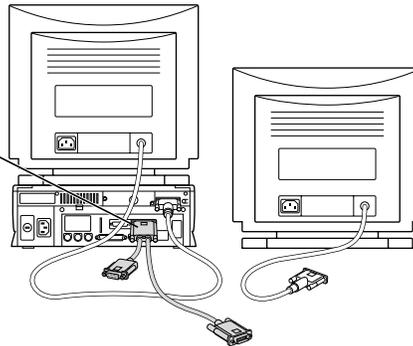
Attach the monitor cable to the built-in monitor port on the back of your computer (or a video card, if one is installed):



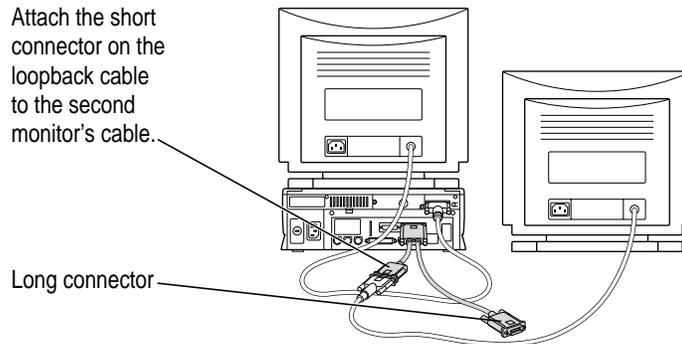
**WARNING** Do not plug a monitor into the joystick port that comes on some models of the PC Compatibility Card, and do not plug a joystick into a monitor port (marked with the icon I/O). Serious damage can result to your equipment.

- 2 **Plug the middle connector on the loopback cable into the port on the PC Compatibility Card and tighten the thumbscrews.**

Attach the middle connector on the loopback cable to the 26-pin port on the PC Compatibility Card.



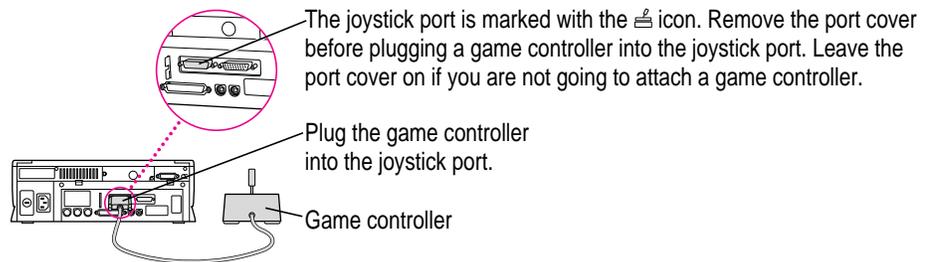
- 3 **Plug the connector on the short end of the cable into the cable for the monitor that you want to use with the PC environment.**



Leave the long connector on the loopback cable unplugged.

### Connecting a PC game controller

Some models of the PC Compatibility Card come with a joystick port. To connect a PC game controller, such as a joystick, remove the plastic cover on the joystick port; then plug your game controller into the port.



**WARNING** Do not plug a monitor into the joystick port, and do not plug a joystick into a monitor port (marked with the icon ). Serious damage can result to your equipment.

## What's next?

Go next to Chapters 4 through 7 of the *PC Compatibility Card User's Manual* for instructions on installing and using your software.

For information on connecting a mouse, printer, MIDI device, modem or other serial device, or connecting to a network, see Chapter 3, "Connecting Monitors and Other Equipment," in the *PC Compatibility Card User's Manual*.





# PC Compatibility Card Installation Guide

.....  
*Installation instructions for newer Macintosh models  
not covered in the User's Manual*

 Apple Computer, Inc.

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## Introduction

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This booklet describes how to install the PC Compatibility Card hardware in three newer Macintosh computer models. It also describes how to connect equipment—such as a monitor—to these models for use with the card.

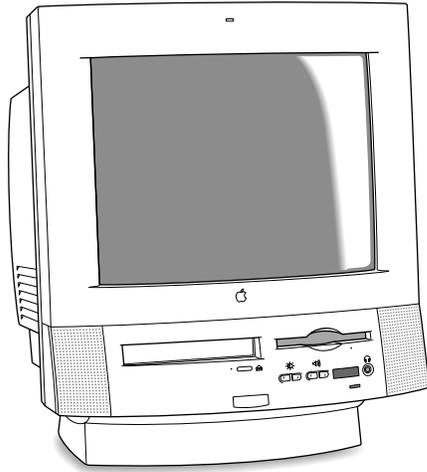
If you want to install the PC Compatibility Card in a Power Macintosh 7200, 7500, 7600, 8500, or 9500, see the installation instructions in the *PC Compatibility Card User's Manual*.

**IMPORTANT** If you received this manual with a computer, the PC Compatibility Card hardware is already installed. If you want to install additional memory on your card, see the *PC Compatibility Card User's Manual*.

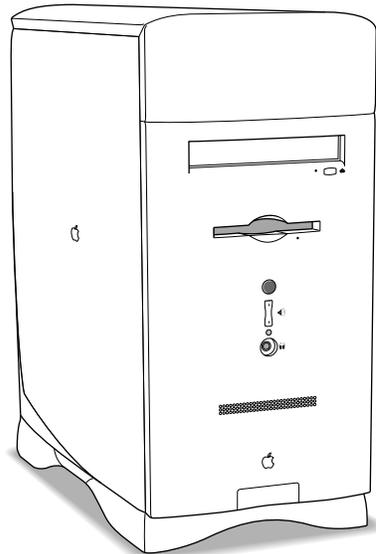
**WARNING** The installation of the PC Compatibility Card is technically complex. Unless you are comfortable installing components inside computers, Apple recommends that you have the PC Compatibility Card installed by your Apple-authorized dealer (who may charge an installation fee).

To avoid damaging the computer and the card, do not attempt to install the card, install memory, or connect the cables without first reading this documentation.

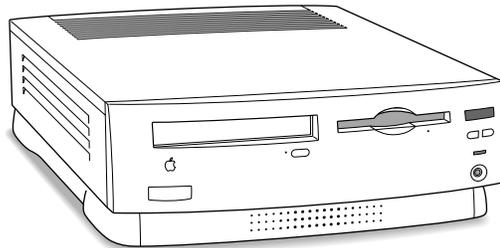
Go to Chapter 1 if you have a 5400 series Macintosh computer (shown below), such as the Macintosh Performa 5400, Macintosh Performa 5420, and the Power Macintosh 5400.



Go to Chapter 2 if you have a 6400 series Macintosh computer (shown below), such as the Macintosh Performa 6400, the Power Macintosh 6400, or any tower Macintosh computer with two PCI (peripheral component interconnect) expansion slots.



Go to Chapter 3 if you have a Macintosh computer with a PCI expansion slot that looks like the illustration below.



Some Macintosh models that look like this one do not have a PCI expansion slot and are not compatible with the PC Compatibility Card. If you are not sure if your computer model has a PCI expansion slot, check the technical specifications information that came with your computer.