

Your Gateway Computer componentguide

Removable Storage











Contents

1	Preparing to Install Your Drive	1
	Preparing your work area	2
	Preventing static electricity discharge	
2	Removing an Existing Drive	5
_	Removing drive software	
	Removing the drive	
3	Installing a New Drive	3
	Identifying connectors 1	4
	Configuring the new IDE drive	
	Setting the IDE jumpers	8
	Configuring the new SCSI drive	20
	Setting the SCSI jumpers	12
	Installing a drive	
	Configuring the BIOS	
	Installing Zip drive software	
	Installing Seagate tape drive software	3 1
4	Troubleshooting 3	3
	General troubleshooting guidelines	₹4
	CD or DVD drive	
	Diskette drive	
	Flash memory drive	
	Zip drive	
	Tape drive	
	Getting technical support	18



Preparing to Install Your Drive

This guide provides the information you need to install a new or replacement:

- CD or DVD drive
- Diskette drive
- Flash memory drive
- Tape drive
- Zip drive

Only the tape and Zip drives require uninstalling and installing software as part of the installation process.





To install a drive, follow these steps:

- **1** Remove drive software (if replacing a Zip or tape drive).
- **2** Remove the existing drive (if replacing a drive).
- **3** Install the new drive.
- **4** Install drive software (if installing a Zip or tape drive).



Preparing your work area



- **1** Find a place that:
 - Is clean. (Avoid dusty areas.)
 - Is a low-static environment. (Avoid carpeted areas.)
 - Has a stable platform on which to set your computer.
 - Is near a telephone in case you need help from Gateway Technical Support. The telephone must be directly connected to a telephone jack and cannot be connected to your computer.

2 Obtain these additional items:

- A Phillips screwdriver.
- A grounding wrist strap (available at most electronic stores).
- A small container to hold hardware parts, such as screws, while you are working.
- The documentation that came with your computer.

Important



If you do not have printed documentation, go to the Gateway Web site (<u>support.gateway.com</u>) and print the appropriate document **before** starting the installation procedure.



Preventing static electricity discharge

The components inside your computer are extremely sensitive to static electricity, also known as *electrostatic discharge* (ESD).

Warning



ESD can permanently damage electrostatic discharge-sensitive components in your computer. Prevent ESD damage by following ESD guidelines every time you open the computer case.

Warning



To avoid exposure to dangerous electrical voltages and moving parts, turn off your computer and unplug the power cord and modem and network cables before opening the case.

Before opening the computer case, follow these guidelines:

- Turn off your computer.
- Wear a grounding wrist strap (available at most electronics stores) and attach it to a bare metal part of your computer.

Warning



To prevent risk of electric shock, do not insert any object into the vent holes of the power supply.

- Touch a bare metal surface on the back of the computer.
- Unplug the power cord and the modem and network cables.

Before working with computer components, follow these guidelines:

- Avoid static-causing surfaces such as carpeted floors, plastic, and packing foam.
- Remove components from their antistatic bags only when you are ready to use them. Do not lay components on the outside of antistatic bags because only the inside of the bags provide electrostatic protection.
- Always hold expansion cards by their edges or their metal mounting brackets. Avoid touching the edge connectors and components on the cards. Never slide expansion cards or components over any surface.



Removing an Existing Drive

Read this chapter to learn how to remove an existing drive. You need to remove an existing drive if you are replacing a drive.

If you are not replacing a drive, go to "Installing a New Drive" on page 13.

Warning



Avoid exposure to dangerous electrical voltages and moving parts by turning off your computer and unplugging the power cord and modem cable before opening the case.





Removing drive software

If you are installing a diskette, CD, or DVD drive, you do not need to remove any software. Go to "Installing a New Drive" on page 13.

If you did not previously have a Zip drive or tape drive installed in your computer, you do not need to remove any software. Go to "Installing a New Drive" on page 13.

If you are replacing a Zip drive or tape drive, you must uninstall your drive software before you remove the old drive from your computer. Make sure that you have the drive installation diskettes or CDs before removing your current software.



To remove the drive software:

- 1 In Windows XP, click **Start**, then click **Control Panel**. The *Control Panel* window opens.
 - OR -
 - In Windows Me, Windows 2000, Windows 98, or Windows NT 4.0, click **Start, Settings**, then click **Control Panel**. The *Control Panel* window opens.
- **2** Click/Double-click the **Add/Remove Programs** icon. The *Add/Remove Programs* dialog box opens.
- **3** If you are uninstalling drive software in Windows XP or Windows 2000, scroll down the list of installed software, then click **lomega Software** (Zip drive) or **Backup Exec** (tape drive).
 - OR -

If you are uninstalling drive software in Windows Me, Windows 98, or Windows NT 4.0, click the **Install/Uninstall** tab, scroll down the list of installed software, then click **Iomega Software** (Zip drive) or **Backup Exec** (tape drive).

- **4** Click **Add/Remove** or **Remove** and follow the on-screen instructions. If you are asked to remove any shared files, click **No**. (These files may be needed by other programs.)
- **5** When the removal is complete, shut down Windows and turn off your computer.



Removing the drive

To remove the existing drive:

- 1 Turn off your computer, then remove the computer case cover following the static electricity precautions on page 3.
 - See the documentation that came with your computer for instructions on removing your computer case cover.
- **2** If you are removing a CD or DVD drive, disconnect the audio cable by pressing down on the locking tab as you pull the cable out of the audio connector. Make sure that you pull the connector, not the cable.
- If you are removing a CD, DVD, diskette, tape, or Zip drive, disconnect the wide, flat ribbon (data) cable from the drive that you are replacing. Make sure that you pull the connector, not the cable. Note the orientation of the red-striped edge of the data cable. You will attach the data cable to your new drive using the same orientation. Go to Step 6.



- OR -

If you are removing a flash memory drive, go to the next step.

4 Disconnect the front panel USB round data cable from the back of the flash memory drive. Make sure that you pull the connector, not the cable. Note the orientation of the connector. You will attach the data cable to your new drive using the same orientation.





5 Disconnect the flash memory drive's round data cable from the system board. Make sure that you pull the connector, not the cable. Note the orientation of the connector. You will attach the data cable from your new drive using the same orientation.



6 Disconnect the power cable from the back of the drive. Make sure that you pull the connector, not the cable. Move the connector slightly side-to-side, if necessary, to disconnect the cable.



- **7** See the documentation that came with your computer for instructions on sliding the drive out of the computer case.
- **8** If this drive is a replacement for a failed drive, follow the instructions on the return form to send the old drive back to Gateway for credit.



Chapter 2: Removing an Existing Drive



Installing a New Drive

Read this chapter to learn how to:

- Configure IDE and SCSI drives
- Install the drive



Identifying connectors

The following illustrations identify basic drive connectors.

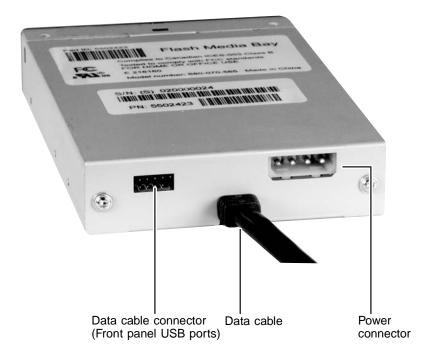
CD, DVD, diskette, tape, and Zip drives



- Power connector. Both small and large power supply connectors attach only one way. CD, DVD, tape, and Zip drives have a large power connector. Diskette drives have a small power connector.
- **Data cable connector.** Most data cable connectors are keyed with a notch. Some older drives, typically diskette drives, are not keyed.
- Data cable. The IDE data cable is wider than the diskette drive data cable. One edge of the cable has a red stripe. The red-striped edge of the cable should be aligned toward the Pin 1 end of the data cable connector. Usually, this is the end of the connector that is nearest the power supply connector. PIN 1 is usually labeled with a small arrow, the number "1," or a low number (for example, "2").

- Jumper block. The jumper block is used to configure your IDE drive as a master, slave, or cable select drive, or to configure your SCSI drive's ID and termination. A label on the drive shows which jumper/pin position corresponds to which setting. Diskette drives do not have a jumper block.
- Analog audio connector. If your drive is a CD or DVD drive, it may have an analog audio connector.
- **Digital audio connector.** If your drive is a CD or DVD drive, it may have a digital audio connector.

Flash memory drives

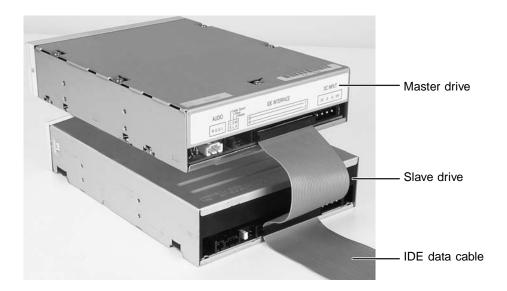


- **Data cable connector.** Connect the front panel USB data cable to the data cable connector.
- Data cable. Connect the flash memory drive's data cable to the Front Panel USB connector on your system board.
- **Power connector.** The large-type power supply connectors are keyed so that they attach only one way.

Configuring the new IDE drive

You can configure CD, DVD, diskette, and Zip drives as *bootable* drives. You can use bootable drives to start up (*boot*) your computer with special bootable media, such as a *system diskette* (a diskette that contains operating system files).

Your system board may contain as many as three controllers (where the wide ribbon cables attach to the main system board or a host adapter add-in card). One controller is for the diskette drive. Two are for IDE drives. One of the IDE controllers is the primary controller and the other is the secondary controller. Each IDE controller can contain two devices, a *master* device and a *slave* device.



Master drives

If the drive you are installing is on the end of the cable, it is the master drive. Master drives are typically bootable, meaning they are used to boot, or start, your computer.

Your IDE drive should be configured as a master if it will be the only drive connected to the IDE data cable or if there will be two drives connected to the cable and the other drive is configured as a slave.

Important



If you have only one drive it must be connected to the end connector on the IDE cable.

Slave drives

If the drive you are installing is in the middle of the cable, it is the slave drive. Slave drives are typically used for storing files and installing programs. You cannot start your computer from the slave drive.

A slave drive is the secondary drive on either the primary or secondary IDE controller. Configure your IDE drive as a slave drive if the drive will be one of two drives connected to the IDE data cable and the other drive is configured as a master drive.

Important

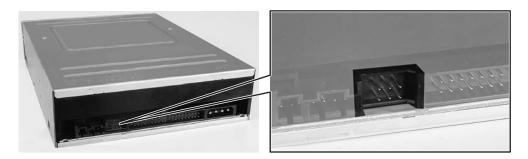


If you are adding a drive and making the new drive the master (boot) drive, the existing drive must be reconfigured as a slave drive.

If there is already one drive connected to the cable before the new IDE drive is installed, it is probably configured as a master. However, some IDE drives require a different master/slave setting when two drives are connected. If you have any problems, see the documentation that came with the existing IDE drive for additional master/slave configuration information.

Setting the IDE jumpers

IDE drives contain a *jumper block*. A jumper block is a set of pins located on the drive. The jumper block is typically located on the rear of the drive, although it may be located on the top or the bottom of the drive.



On some IDE drives, a jumper is placed over two of the pins to configure the drive as the master (or single) drive or as the slave drive. IDE drives are labeled with information about which set of pins must be used to make the drive master or slave.

Other IDE drives use the *cable select* setting to configure the drive. Cable select is a jumper setting that configures the drive as a master or slave drive based on its position on the IDE cable. If both drives on the IDE data cable are configured as cable select, the middle drive is the slave and the end drive is the master.

If you are installing your new drive as a replacement drive, configure the new drive settings so that they match your old drive settings. For example, if your old drive was set as a Master drive, make sure to set the new drive as a Master drive.

In order to maintain the same configuration (master, slave, or cable select), your new drive may require different jumper settings than your current drive. Check the label on your drive for the correct settings.

To set the jumpers for an IDE drive:

- 1 Look at the jumper label to find the jumpers for setting a master, a slave, or a cable select drive. The label is either a sticker on the drive, or it is printed directly on the drive.
- **2** If both of the drives *and* the IDE data cable support cable select, set the jumpers for the drives as cable select. IDE data cables that support cable select should be labeled *CS*. Cable select makes the drive in the middle of the cable the slave, and the drive at the end of the cable the master.
 - OR -

If both drives do not support cable select, go to the next step.

- **3** If the drive is in the middle of the IDE data cable and you are going to configure your drive as the slave drive, set the jumpers as **Slave A**. If Slave A is not an option, set the jumpers as **Slave**.
 - OR -

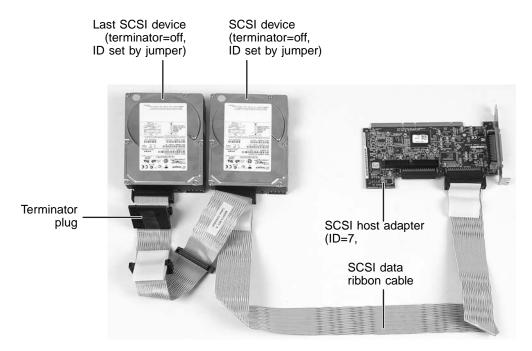
If the drive is at the end of the IDE data cable and you are going to configure your drive as the master drive, set the jumpers as **Master A**. If Master A is not an option, set the jumpers as **Master**.



Configuring the new SCSI drive

If your computer contains SCSI devices, they are connected to a SCSI host adapter add-in card.

To configure SCSI devices correctly on the SCSI cable, you must designate (terminate) the ends of the chain and determine the order of the links (IDs) between the ends of the SCSI chain.



Termination

A SCSI device has a terminator jumper which can be set to On (for the last device on the cable) or Off (for devices in the middle). The terminator jumper on the last device should be set to Off if the cable has a terminator plug attached to the end.

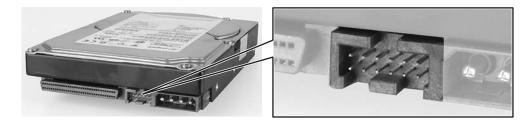
Generally, your computer's SCSI host adapter is at one end of the cable and a terminated device or terminator plug is at the other. The SCSI host adapter can be set so you can start up from any device on the SCSI chain.

SCSIIDs

In addition to recognizing the ends of the SCSI chain, your computer needs to designate the order of the links. For this reason, each device on the SCSI chain requires a unique device ID. This ID can be any number between 0 and 15 (for Ultra Wide SCSI) **other than 7**, which is the factory preset for the host adapter. The ID number (address) can be set on most SCSI devices by adjusting jumpers on pins.

Setting the SCSI jumpers

SCSI drives contain a *jumper block*. A jumper block is a set of pins located on the drive. On SCSI drives, a jumper is placed over two of the pins to configure the SCSI drive's termination setting. Other jumpers are placed over additional sets of pins to configure the ID setting.

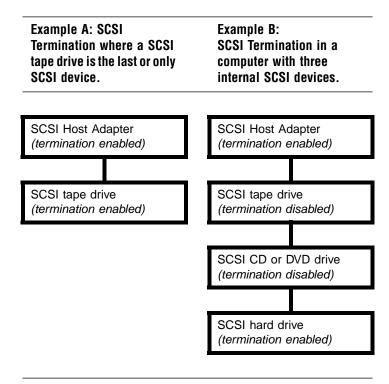


To set the jumpers for a SCSI drive:

- 1 Start your computer. During startup, SCSI ID numbers are identified on the screen.
- **2** Make note of the SCSI ID numbers in use, then turn off your computer.
- **3** Look at the new drive's jumper label to find the jumpers for setting the SCSI drive's termination and ID. The label is either a sticker on the drive, or it is printed directly on the drive.
- **4** Set the drive's SCSI ID to a number that is not being used by another SCSI device.



5 Check SCSI termination.



If your drive will be the last device on the SCSI cable or the only device on the cable, as shown in Example A, make sure that a jumper is installed on the SCSI termination jumper pins or that a terminator plug is installed.

- OR -

If your drive will be in the middle of a SCSI chain, as shown in Example B, remove the termination jumper. Make sure that the last SCSI device on the cable has termination enabled or that a terminator plug is installed.



Installing a drive

This section tells you how to install the drive and how to attach the cables.

To install a drive:

- 1 Slide the drive into the bay and secure the drive in the drive bay by following the instructions in your computer user's guide.
- **2** If your drive is a CD or DVD drive, connect the audio cable.

Important



If you are adding a recordable CD or DVD drive to your computer and the audio cable is attached to your other CD or DVD drive, you can remove the audio cable from your other drive and attach it to your new drive.

3 Connect any unused power cable to the power supply connector on the drive. Use a large power connector for CD, DVD, flash memory, Zip, and tape drives, and use a smaller power connector for diskette drives.



If you do not have enough power connectors, disconnect a power cable from one of your drives and place the Y-adapter power cable that came with the new drive on the end of the existing power cable to make two power connectors.



4 If you are installing a CD, DVD, diskette, tape, or Zip drive, connect the data cable to the back of the drive. Be careful not to force the cable connector or bend any of the pins. Follow the data cable from the connection on the drive to the other end of the cable. Make sure that the cable is connected securely to the data cable connector on the main system board or the SCSI host adapter card. Go to Step 7

Caution



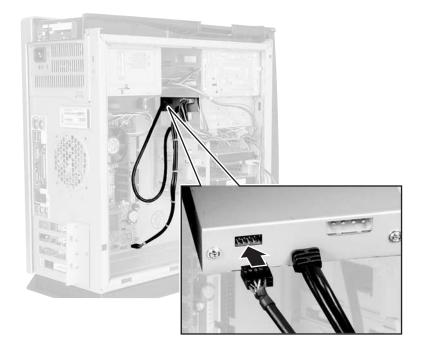
Make sure that Pin 1 on the cable connects to Pin 1 on the drive or the drive will not function. Pin 1 on the drive is typically located next to the 4-pin power cable. Check your drive for a label indicating Pin 1. Pin 1 on the cable is indicated by a red stripe on the edge of the cable.



- OR -

If you are installing a flash memory drive, go to the next step.

5 Connect the front panel USB round data cable to the back of the flash memory drive. Be careful not to force the cable connector or bend any of the pins.





6 Connect the flash memory drive's round data cable to the Front Panel USB connector on the system board. Be careful not to force the cable connector or bend any of the pins.



- 7 Check all cables in your computer. Make sure that all are connected securely and that the cables are routed so that they will not bind or crimp when you replace the computer case cover.
- **8** Replace the computer case cover. See the documentation that came with your computer for instructions on replacing the cover.
- **9** Reconnect the external cables, then plug in the power cord.

10 Turn on your computer.

- If you installed a flash memory drive, you are finished. Stop here.
- If you installed a diskette, CD, or DVD drive, go to "Configuring the BIOS" on page 28.
- If you installed a Zip drive and want it to be bootable, go to "Configuring the BIOS" on page 28. If you do not want the Zip drive to be bootable, go to "Installing Zip drive software" on page 30.
- If you installed a Seagate tape drive, go to "Installing Seagate tape drive software" on page 31.



Configuring the BIOS

If you are installing a SCSI drive, you do not need to configure the BIOS. The installation is complete.

A *boot drive* is a drive that can be used to start your computer. If you have multiple boot drives, you can specify their boot order. For example, setting a diskette drive as a first boot device and setting a Zip drive as a second boot device specifies that your computer first checks the diskette drive for a diskette containing computer startup files, then it checks the Zip drive for a disk containing computer startup files. If it fails to find either, it continues to start from the hard drive.

Older computers may not have boot support for some drives. If your computer does not support all drives, those drives will not be available in the *boot device* section of the BIOS, so you must update your BIOS. For more information, see your computer user's guide.

After you install your drive, open the BIOS Setup utility and make sure that the computer recognizes your drive and that the boot order of your computer is correct.



To configure the BIOS:

- 1 Press F2 while restarting your computer to open the BIOS Setup utility. Some older computer models require you to press F1 instead.
- **2** Press the right arrow key to open the **Advanced** menu, then set the master and slave settings for the Primary and Secondary PCI IDE Interface to **Auto Configured**.
 - Navigate among the menus and selections by pressing the arrow keys. Change selection values by pressing + or .
- **3** If you want to start (boot) from your drive, go to the next step. Otherwise, go to Step 8.
- **4** If your computer uses a Phoenix BIOS, press the right arrow key to open the **Boot Options** menu.
 - OR -

If your computer uses an AMI BIOS, configure each device independently from the Main menu.

- 5 Specify which devices you want to boot from, and in which order.
 - To specify your 3.5-inch, 1.44 MB diskette drive, select **Floppy**.
 - To specify the Zip drive, select **Floptical** if your computer is running AMI BIOS, or select **lomega Zip** if your computer is running Phoenix BIOS.
- **6** If your BIOS contains the option **Removable Devices**, set the boot order for your multiple drives, then press Esc.
- **7** If you removed the 3.5-inch diskette drive and did not replace it, go to the next step. Otherwise, go to Step 10.
- 8 Press the right arrow key to display the Advanced menu, then press ENTER to open the Peripheral Configuration menu.
- **9** Set Floppy Disk Controller to Disabled, then press Esc.
- **10** Press the **F10** key, then press **ENTER**.
 - If you installed a diskette, CD, or DVD drive, the installation is complete.
 - If you installed a Zip drive, go to "Installing Zip drive software" on page 30.
 - If you installed a Seagate tape drive, go to "Installing Seagate tape drive software" on page 31.



Installing Zip drive software

If you installed a Zip drive, you need to install additional software. Use the $Iomegaware^{TM}$ CD to install your Zip drive software.

Important



If you are installing in Windows NT 4.0, Service Pack 4 (or greater) is required for Zip compatibility. You must have administrator privileges for your local computer to install the Zip drive software and to run the ToolsNT utilities.

If you reinstall Windows NT 4.0, you may need to reinstall the Zip drive software.

To install the Zip drive software:

- 1 Start your computer.
- 2 Insert the *IomegaWare* CD into your computer's CD or DVD drive.
- **3** If the Iomega setup program starts automatically, go to Step 7.
 - OR -

If the Iomega setup program does not start automatically, go to the next step.

- **4** In Windows XP, click **Start**, then click **My Computer**. The *My Computer* window opens.
 - OR -

In Windows Me, Windows 2000, Windows 98, or Windows NT 4.0, double-click the **My Computer** icon. The *My Computer* window opens.

- **5** Click/Double-click the CD or DVD drive letter (usually D: or E:). The CD or DVD drive window opens.
- 6 Double-click Setup.exe.
- 7 Install the software by following the on-screen instructions.
- **8** When the software installation is complete, restart your computer.



Installing Seagate tape drive software

If you installed a Seagate tape drive, you need to install additional software. Use the Seagate Backup $Exec^{TM}$ CD to install your tape drive software.

Important



If your computer is running Windows NT 4.0, you must have administrator privileges for your local computer to install the Seagate Backup Exec software.

If you reinstall Windows NT 4.0, you may need to reinstall the Seagate Backup Exec software.

To install the Seagate tape drive software:

- **1** Start your computer.
- **2** Insert the *Seagate Backup Exec CD* into your computer's CD or DVD drive.
- **3** If the Backup Exec setup program starts automatically, go to Step 7.
 - OR -

If the Backup Exec setup program does not start automatically, go to the next step.

- **4** In Windows XP, click **Start**, then click **My Computer**. The *My Computer* window opens.
 - OR -

In Windows Me, Windows 2000, Windows 98, or Windows NT 4.0, double-click the **My Computer** icon. The *My Computer* window opens.

- **5** Click/Double-click the CD or DVD drive letter (usually D: or E:). The CD or DVD drive window opens.
- **6** Double-click **Setup.exe**.
- 7 Install the software by following the on-screen instructions.
- **8** When the software installation is complete, restart your computer.



Chapter 3: Installing a New Drive



Troubleshooting

This chapter provides some solutions to common drive problems. Read this chapter to learn how to:

- Understand general troubleshooting guidelines
- Troubleshoot CD or DVD drive problems
- Troubleshoot diskette drive problems
- Troubleshoot flash memory drive problems
- Troubleshoot Zip drive problems
- Troubleshoot tape drive problems
- Get technical support





General troubleshooting guidelines

If your computer does not recognize the new drive, try these troubleshooting tips before calling Gateway Technical Support:

- Review the installation procedures. Make sure that you did not skip any of the steps.
- Reconnect the power cable on the drive.
- Reconnect the data ribbon cable on the drive. Make sure that the red-stripe edge of the data ribbon cable aligns with Pin 1 on your drive.
- Replace the data ribbon cable with the new cable that was included in the drive kit to see if the old cable is defective and needs to be replaced.
- Make sure that the jumper settings on the back of the drive are set correctly. Review the instructions on configuring the drive to see if you placed the jumpers over the correct pins.
- Check your BIOS Setup utility to see if your drive settings are correct.

CD or DVD drive

Some of the steps in this section may require you to remove the computer case cover. Follow "Preventing static electricity discharge" on page 3 when working inside your computer.

Your computer does not recognize the CD or DVD drive.

- Make sure that the CD or DVD label is facing up, then try again.
- Try a different CD. Occasionally CDs are flawed and cannot be read by the CD or DVD drive.
- Shut down and restart your computer.
- Clean the disc.
- Open the BIOS Setup utility by pressing F2 while restarting your computer. (Some older computer models require you to press F1 instead.) Make sure that the IDE controllers are enabled.
- Make sure that the drive is configured correctly, and reconfigure the drive, if necessary. See "Installing a New Drive" on page 13.
- Open your computer and make sure that the cables are connected correctly to the CD or DVD drive and the system board IDE connector.
- If you have a SCSI device in your computer, check the cable connected to the SCSI card. If the CD or DVD drive is the last drive on the cable (the drive farthest from the card), make sure that the CD or DVD drive is terminated.

The CD or DVD drive makes a buzzing noise.

High speed compact disc drives may vibrate or make noise. Discs that are warped, have an imperfect hole in the middle, or have an off-center or unequal image printed on them may cause vibrations. Even though the disc is vibrating or making a noise, that is not necessarily a problem. As long as the data on the disc can be read, the disc and the drive are fine. Such vibrations and noises are normal side effects with many computer components.

Audio CD does not produce sound.

- Make sure that the CD label is facing up, then try again.
- Some CDs have copy protection software. You may not be able to play these CDs on your computer.
- If you have two CD drives, try the other drive.
- Check the speaker cables. Make sure that they are connected correctly and securely.
- Make sure that the volume controls are turned up. For more information about volume controls, see the documentation that came with your computer.
- Make sure that mute controls are turned off. For more information about volume controls, see the documentation that came with your computer.
- Shut down and restart your computer.
- Clean the CD.

A DVD movie will not play.

- Make sure that the label is facing up, then try again.
- Shut down and restart your computer.
- Clean the DVD.

DVDs and drives contain *regional codes* that help control DVD title exports and help reduce illegal disc distribution. To be able to play a DVD, the disc's regional code and your DVD drive's regional code must match.

The regional code on your DVD drive is determined by your computer's delivery address. The regional code for the disc is on the disc, disc documentation, or packaging. The regional code for the United States and Canada is 1, and the regional code for Mexico is 4.

If the DVD movie does not play, the disc's regional code and your regional code may not match.

Diskette drive

Some of the steps in this document may require you to remove the computer case cover. Follow "Preventing static electricity discharge" on page 3 when working inside your computer.

Your computer cannot access the diskette drive.

You may not be able to copy information to or from the diskette drive if:

- The diskette is write-protected.
- The diskette drive or diskette is damaged.
- The settings in the BIOS are incorrect.
- The cable that goes from the back of the diskette drive to the system board or controller card is defective or not connected securely.
- There is a conflict within the computer with some newly added hardware or software.
- The drive is damaged or a password has been enabled.

Your computer cannot access the diskette.

The diskette may be damaged. Reformat the diskette, or try another diskette.



To format a diskette:

- 1 Insert a diskette into the diskette drive.
- **2** In Windows XP, click **Start**, then click **My Computer**. The *My Computer* window opens.

- OR -

In Windows Me, Windows 2000, Windows 98, or Windows NT 4.0 double-click the **My Computer** icon. The *My Computer* window opens.



3 Right-click the icon for the diskette drive, click **Format**, then click **Start**.

Caution



Any information on the diskette is deleted when you format the diskette.



Your computer does not recognize the diskette drive.

■ If the diskette drive is identified incorrectly in the BIOS, you may not be able to start from or format a diskette.



- 1 Open the BIOS Setup program by pressing F2 while restarting your computer. (Sometimes older computer models require you to press F1 instead.)
- **2** Make sure that the drive settings correspond with the drive type (for example, **3.5-inch**, **1.44 MB** is the current standard for diskette drive 0 or diskette drive A).
- **3** Check the Security section of the BIOS Setup utility and remove the Supervisor password if one has been set.

The supervisor password causes the diskette drive to display error messages identical to those usually associated with a defective diskette drive or cable.



■ If you have checked the BIOS settings and the settings are correct, the problem may be a poor connection between the diskette drive and the system board. Because no locking clips hold the diskette drive cable in place, the cable may need to be reseated.

To reseat the cable:

- 1 Turn off your computer, then remove the computer case cover following the static electricity precautions on page 3.
 - See the documentation that came with your computer for instructions on removing your computer case cover.
- 2 On the back of the diskette drive, find the power cable and the flat, gray ribbon cable.
- **3** Firmly pull the ribbon cable straight off the back of the diskette drive (pull the connector, not the cable) and press it firmly back in place the same way you took it off.
- **4** Trace the cable to its connector on the system board. Unplug the cable (pull the connector, not the cable), then plug it back in, making sure that it fits securely into the keyed connector.
- **5** Replace the computer case cover, reconnect the cables, then restart your computer. Try to start from a system diskette and try to format a diskette. For more information, see "To format a diskette:" on page 37.
- **6** If you are still unable to start from a system diskette or format a diskette, shut down your computer, then open the computer case cover.
- **7** Pull the power cable off the back of the drive (pull the connector, not the cable).
- **8** Replace it with another available power cable that is the same size as the one originally on the drive.
- **9** Replace the computer case cover, reconnect the cables, then restart your computer. Try to start from a system diskette and try to format a diskette. For more information, see "To format a diskette:" on page 37.



- If you have recently added any hardware to the computer, such as a tape backup unit, sound card, scanner, or network card, try removing these items from the computer one at a time.
 - Each time you remove an item, try to start your computer using a system diskette or try to format a diskette. If the diskette drive works, it is possible the hardware that was added may be conflicting with the diskette drive. Re-configure the new hardware or try replacing it to see if the problem persists.
- If you recently added new software to the computer, try removing the new software. If that solves the problem, contact the software publisher for additional information.

The diskette drive light stays on continuously.

If the light on the diskette drive(s) stays on continuously from the time your computer is started, the data cable on the system board or controller card may be on backwards.



To fix the data cable connection:

- **1** Shut down your computer.
- **2** Open the computer case.
- **3** Locate where the data cable is attached to the system board.
- **4** Pull the cable off gently (pull the connector, not the cable).
- **5** Turn the cable around 180 degrees and put it back onto the system board.
- **6** Close the computer case.



If you started having diskette drive problems after adding a tape backup unit, try using the additional diskette cable that came with the tape backup unit kit. Instructions for this operation are included in the tape backup unit kit.

Diskette drive error messages

Diskette Drive 0 Failure or Diskette Drive 1 Failure

This error is usually seen as the computer starts up.

- Check the BIOS to make sure that the drives are identified correctly.
- Open the computer and reseat the diskette drive cable.
- Try another diskette drive cable.

Not ready reading drive A or Not ready reading drive B

- Make sure that the drives are correctly identified in the BIOS. For more information, see "Configuring the BIOS" on page 28.
- Make sure that the drive cables are connected securely. For more information, see "Installing a drive" on page 23.
- If the supervisor password is enabled in the BIOS, remove the password.

Invalid drive specification

This error can be caused by incorrect BIOS settings including the diskette drive not being identified at all. Check the BIOS to make sure that the drives are identified correctly. For more information, see "Configuring the BIOS" on page 28.

Invalid media type

This error may occur if you are trying to format a diskette that is defective or if you are trying to use a media type that is incompatible with your diskette drive.

Error selecting drive

This error occurs primarily in Windows when you attempt to access the diskette drive without a diskette inserted.

Non-system disk or disk error

This error occurs if you have a diskette other than a system (boot) diskette in the diskette drive as you start up the computer. If you have a bootable system diskette in the drive and you still receive this error, the diskette drive cable may not be connected securely. See "To reseat the cable:" on page 39.

Always make sure that the diskettes you are attempting to use are high density, good quality diskettes.

Flash memory drive

Some of the steps in this document may require you to remove the computer case cover. Follow "Preventing static electricity discharge" on page 3 when working inside your computer.

The green LED does not turn on.

- Make sure that your computer is receiving power.
- Make sure that the power cable connection to the flash memory drive is secure.
- Make sure that there is a flash memory card in the drive.

The green LED blinks on and off.

The green LED lets you know that you have inserted your flash memory card into the flash memory drive correctly. After you insert the memory card into the drive slot, the green LED, next to the drive slot, blinks on and off several times. When the memory drive recognizes the memory card, the LED stays on. The green LED blinks on and off as data is read from and written to a memory card.

Camera gives an error message after formatting a 64 MB, or larger, memory card in Windows XP.

Windows XP automatically selects FAT32 when formatting memory cards larger than 64 MB. However, most memory cards use FAT12, FAT16, or other proprietary formats. Reformat the memory card in the camera or other device that you use the card in.

MP3 player cannot read music files on memory card.

Some MP3 players use a proprietary file format that Windows XP does not support. Instead of copying files from your computer to the memory card, connect the MP3 player to the computer and use the software that was included with the player to upload the songs to the player.

Write Protected error when trying to copy files to a memory card.

Memory Stick and Secure Digital (SD) memory cards have a physical lock that can be used to prevent data from being written to or erased from the memory card. Look for a small slide switch on the bottom of the card. If you want to write data to the memory card, make sure that the switch is in the unlocked position.

Cannot copy songs from a Secure Digital memory card to my computer.

Secure Digital memory cards have copy protection algorithms that prevent you from copying copyrighted material from the card to another device. You can play copyrighted files from the memory card, but you cannot copy the copyrighted files from the memory card.

Zip drive

Some of the steps in this section may require you to remove the computer case cover. Follow "Preventing static electricity discharge" on page 3 when working inside your computer.

The green busy light on the Zip drive does not turn on.

- Make sure that your computer is receiving power.
- Make sure that the power cable connection to the Zip drive is secure.
- Make sure that there is a disk in the drive.

The Zip drive is not assigned a drive letter, or the lomega software cannot find the Zip drive.

- Make sure that Pin 1 is connected correctly on all IDE data cable connections. The red stripe on the data cable must align with Pin 1 on each connection. If the cable does not have a keyed connector, make sure that the connector is covering all of the pins. For more information, see "Installing a drive" on page 23.
- Make sure that the Zip drive is configured correctly. See "Configuring the new IDE drive" on page 16 or "Configuring the new SCSI drive" on page 20, depending on the type of drive that you have.
- If there is another drive on the same IDE controller, make sure that it is configured correctly. See the documentation that accompanied the other IDE drive for configuration information. (Often this information is on the drive case.)
- Make sure that BIOS support for the Zip drive is enabled in the BIOS. If you are unable to enable BIOS support for the Zip drive in the BIOS Setup utility and the Zip drive does not appear on the computer, then your computer may have an incompatible BIOS that does not correctly understand IDE drives. Download and install an updated BIOS from the Gateway Web site at support.gateway.com.

- Make sure that the software drivers for the Zip drive are correctly installed. See "Installing Zip drive software" on page 30.
- If your computer's operating system is Windows 98, make sure that the operating system is running in 32-bit mode (Protected mode).
- To determine if the operating system is running in 32-bit mode:
 - 1 Right-click the My Computer icon, then click Properties.
 - **2** Click the **Performance** tab and confirm that **File System** and **Virtual Memory** are listed as 32-bit.
 - **3** If the mode is 16-bit, see the Windows documentation for instructions on changing the operating system to 32-bit.



- Some IDE hard drives do not work correctly unless they are in a certain position on the IDE cable. You may need to reverse the position of the master drive and the Zip (slave) drive on the cable for the drives to work correctly.
- If your computer still does not recognize the Zip drive, the existing IDE master drive may not allow access to a slave drive on the same cable. Try installing the Zip drive on the secondary IDE controller.

Your computer does not recognize a slave drive connected to the same IDE cable as a Zip master drive.

- Make sure that Pin 1 is connected correctly on all IDE data cable connections. The red stripe on the data cable should align with Pin 1 on each connection. If the cable does not have a keyed connector, make sure that the connector is covering all of the pins.
- Make sure that the slave drive is jumpered correctly as a slave. See the documentation that came with the slave drive for configuration information. (Often this information is on the drive case.)
- Some IDE hard drives do not work correctly unless they are in a certain position on the IDE cable. You may need to reverse the position of the slave drive and the Zip (master) drive on the cable for the slave drive to work correctly.
- If your computer still does not recognize the slave drive, configure the jumper settings on the Zip drive for the Cable Select option. For more information, see "Setting the IDE jumpers" on page 18.

Tape drive

Some of the steps in this section may require you to remove the computer case cover. Follow "Preventing static electricity discharge" on page 3 when working inside your computer.

After a period of successful operation, the tape drive appears to fail during a backup or restore.

- Make sure that all cables are securely connected and jumpers are set appropriately.
- Turn your computer off, then restart your computer. Re-run the backup software, making sure that no other programs (such as virus scanners) are running.
- Remove the tape cartridge, then reinsert it into the drive.
- Try a different tape cartridge, preferably one that has never been used before.
- Make sure that you are using the correct type of tape cartridge for your tape drive model.
- Re-tension the tape, see "Re-tensioning a backup tape." on page 45.
- Clean the tape drive, see "Cleaning a tape drive." on page 46.

Re-tensioning a backup tape.

Tapes must be re-tensioned frequently to ensure data integrity and optimize drive performance. If you ever have a problem reading a tape, re-tensioning may solve the problem. The tape drive software has a utility for re-tensioning tapes. Tape re-tensioning is recommended whenever:

- A cartridge is being used for the first time
- A cartridge has not been used for over a month
- A cartridge has been dropped
- A cartridge has been shipped from one location to another
- A cartridge has been exposed to a significant change in temperature

For best performance, cartridges used for daily backups should be re-tensioned at least once a week.

Cleaning a tape drive.

The tape drive needs to be cleaned. You can clean the drive using one of two methods:

- Use a Travan cleaning cartridge
- Clean the drive head manually



- 1 Moisten a clean, foam-tip swab in isopropyl alcohol. The swab should be wet but not dripping.
- 2 Hold the drive access door open and gently wipe the tape head using an up-and-down motion.
- 3 Use a second swab saturated in isopropyl alcohol to wipe the capstan. The capstan is the flat roller just to the left of the tape head. Rotate the capstan and clean its entire surface. Allow at least three minutes for the alcohol to dry before using the drive.



Your computer does not recognize your new IDE tape drive.

- Make sure that you have correctly installed the Seagate Backup Exec software.
- Make sure that all cables are attached firmly.
- Check with the manufacturer of your IDE controller chip set to make sure that you have the latest drivers for your operating system. Outdated or incorrect drivers provide limited hardware support and can result in Windows being unable to detect your tape drive.
- You may need to reconfigure your tape drive as the master or slave drive using the Master/Slave jumpers.
 - If the tape drive is the only device on the IDE cable, set the jumper to configure it as the master.

If there are two IDE devices on a single cable, make sure that the tape drive is configured as the slave. Configure the other device as the master.

Your computer does not recognize your new SCSI tape drive or other SCSI devices:

- Make sure that you have correctly installed the Seagate Backup Exec software.
- Make sure that all cables are attached securely.
- Check the SCSI ID of each device in the SCSI chain to make sure that no two devices have the same ID number (the controller is usually ID 7 and the bootable hard drive is usually ID 0).
- Make sure that SCSI termination is set correctly for each SCSI device. Termination should be enabled for SCSI devices at each end of the SCSI chain. All other SCSI devices must have termination disabled.
- Make sure that you are using the latest drivers for your SCSI host adapter and operating system. Contact the manufacturer of your SCSI host adapter for driver information.

Getting technical support

If none of these solutions resolve your drive problems, contact Gateway Technical Support for further assistance. For information about the different methods for contacting Gateway Technical Support, see the user's guide that came with your computer.



Safety, Regulatory, and Legal Information

A

Regulatory compliance statements

United States of America

Federal Communications Commission (FCC)
Unintentional emitter per FCC Part 15

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.



This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment to an outlet on a different circuit from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

Compliance Accessories: The accessories associated with this equipment are: shielded video cable when an external monitor is connected. These accessories are required to be used in order to ensure compliance with FCC rules.

Caution



Changes or modifications not expressly approved by Gateway could void the FCC compliance and negate your authority to operate the product.

Canada

Industry Canada (IC) Unintentional emitter per ICES-003

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par Industrie Canada.

Laser safety statement

All Gateway systems equipped with CD and DVD drives comply with the appropriate safety standards, including IEC 825. The laser devices in these components are classified as "Class 1 Laser Products" under a US Department of Health and Human Services (DHHS) Radiation Performance Standard. Should the unit ever need servicing, contact an authorized service location.

Warning



Use of controls or adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure. To prevent exposure to laser beams, do not try to open the enclosure of a CD or DVD drive.

California Proposition 65 Warning

Warning



This product contains chemicals, including lead, known to the State of California to cause cancer and/or birth defects or reproductive harm.

Notices

Copyright © 2003 Gateway, Inc. All Rights Reserved 14303 Gateway Place Poway, CA 92064 USA

All Rights Reserved

This publication is protected by copyright and all rights are reserved. No part of it may be reproduced or transmitted by any means or in any form, without prior consent in writing from Gateway.

The information in this manual has been carefully checked and is believed to be accurate. However, changes are made periodically. These changes are incorporated in newer publication editions. Gateway may improve and/or change products described in this publication at any time. Due to continuing system improvements, Gateway is not responsible for inaccurate information which may appear in this manual. For the latest product updates, consult the Gateway Web site at www.gateway.com. In no event will Gateway be liable for direct, indirect, special, exemplary, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages.

In the interest of continued product development, Gateway reserves the right to make improvements in this manual and the products it describes at any time, without notices or obligation.

Trademark Acknowledgments

1-800-GATEWAY, ActiveCPR, ALR, AnyKey, black-and-white spot design, CrystalScan, Destination, DestiVu, EZ Pad, EZ Point, Field Mouse, Gateway 2000, Gateway Country, gateway.net, Gateway stylized logo, Perfect Scholar, Solo, TelePath, Vivitron, stylized "G" design, and "You've got a friend in the business" slogan are registered trademarks and black-and-white spotted box logo, GATEWAY, Gateway Astro, Gateway @Work, Gateway Connected touch pad, Gateway Connected music player, Gateway Cyber:)Ware, Gateway Education:)Ware, Gateway Flex Case, Gateway Gaming:)Ware, Gateway GoBack, Gateway Gold, Gateway Learning:)Ware, Gateway Magazine, Gateway Micro Server, Gateway Money:)Ware, Gateway Music:)Ware, Gateway Networking Solutions, Gateway Online Network (O.N.) solution, Gateway Photo:)Ware, Gateway Professional PCs, Gateway Profile, Gateway Solo, green stylized GATEWAY, green stylized Gateway logo, Gateway Teacher:)Ware, Gateway Video:)Ware, HelpSpot, InforManager, Just click it!, Learn@Gateway, Kids BackPack, SERVE-TO-ORDER, Server Watchdog, the Spotted G Gateway Logo and the Spotted G Logo, SpotShop, Spotshop.com, and Your:)Ware are trademarks of Gateway, Inc. Intel, Intel Inside logo, and Pentium are registered trademarks and MMX is a trademark of Intel Corporation. Microsoft, MS, MS-DOS, and Windows are trademarks or registered trademarks of Microsoft Corporation. All other product names mentioned herein are used for identification purposes only, and may be the trademarks or registered trademarks of their respective companies.

MAN US REMOVE STORAGE INST R6 5/03

