



SyQuest®



**1.5 GB Internal EIDE
Removable Cartridge Disk Drive**

Installation Guide for
PC Compatible Systems

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Thank you for buying a SyQuest removable cartridge hard drive, a truly unique combination of powerful features and performance. Our goal is to make your drive an invaluable asset for years to come, starting today. If you have questions or need assistance installing your drive, contact SyQuest at one of the numbers listed below.

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Safety Standards

This product meets the following national and international regulations:

- UL 1950 Standard for Safety of Information Processing and Business Equipment
- UL Standard for Safety of Information Technology
- CSA C22.2 No. 154 Data Processing Equipment
- CSA C22 No. 220 Information Processing Equipment
- IEC 435 Safety Requirements for Data Processing Equipment
- IEC 380 Safety of Electrical Energized Office Equipment
- IEC 950 Safety of Information Technology Equipment in Electrical Business Equipment
- VDE 0871/1984
- VFG 243/1991

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- Reorient the antenna.
- Relocate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, consult your dealer or an experienced radio/television technician for additional suggestions. The booklet entitled *How to Identify and Resolve Radio-TV Interference Problems*, prepared by the Federal Communications Commission, may be helpful. This booklet, Stock No. 004-000-003454, is available from the U.S. Government Printing Office, Washington, DC 20402.

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The SyJet removable disk drive cartridge is covered by one or more of the following U.S. Patents: 4,503,474; 4,717,981; 4,864,452; 4,965,691; 5,218,503; 5,280,403; 5,422,775; 5,400,201; 5,523,902; DES367,579; DES342,062.

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A

Using the SyQuest Utilities

SyQuest provides Windows 95, Windows 3.1x, and DOS utilities for managing SyJet drive and cartridge functions such as cartridge formatting, file duplication, and back-up. Other utilities include settings for write protection, audio/video mode and write verify.

These self-documenting utilities are automatically installed with the SyQuest device-driver software, as instructed in Chapter 3. To access the SyQuest utilities:

- Windows 95 users double-click the SyQuest Win95 Utility icon.
- Windows 3.1x users double-click the SyQuest Windows Utilities icon.
- DOS users type SQSHELL.

Note: OS/2 and Windows NT users must boot their system under DOS and run the program SQATPREP to use these utilities. This program is located on the SyQuest Installation Diskette.

SyJet Cartridge Features

SyQuest provides these utilities for the SyJet cartridge:

Write-Protect Mode: SyJet cartridges are shipped from the factory ready to record data (write protection disabled). Use the write-protect utility to enable or disable write protection.

Write-Verify Mode: SyJet drives are shipped with this data reliability feature turned on. When turned on, a SyJet drive writes data and then reads and compares written data with the original data. To maximize performance or when operating in audio/video mode, turn this feature off.

Audio/Video Mode: A/V mode is a special setting used for maximizing read and write performance. Data is written sequentially and error checking is disabled. This mode is for audio and visual data only. When enabling A/V mode, you must also disable Write-Verify Mode. Never use this mode for other types of data. File system corruption may occur.

Lock or Unlock: (for Windows 3.1x, OS/2, and DOS only) This feature controls the eject-button function. When locked, you must send a software Unlock command *and* depress the eject button on the SyJet drive to remove a cartridge.

Under OS/2, right-click on the SyJet drive icon and select Unlock to remove a cartridge.

Windows 95 and Windows NT Version 4.0 automatically lock a SyJet drive while writing data, and then unlock the drive after data is written. OS/2 always locks a SyJet drive.

To use these utilities in Windows:

- 1. Double-click SyQuest's Win95 or Windows 3.1x icon.**
- 2. Click the Control button, then the SyJet drive letter.**
- 3. Select either Set to On or Reset to Off in the Control Box.**

To use these utilities in DOS:

- 1. Type SQSHELL from a DOS prompt.**
- 2. Select the desired item from the menu of options.**

SyJet Drive Features

SyQuest provides these DOS-based utilities for the SyJet drive:

Clean Heads: This utility allows the heads of the drive to run special diagnostics that remove any debris that may have settled near the heads. Use this routine only if standard data-recovery actions (running Scandisk under Windows 95 or 3.1x) fail.

Eject Tone: SyJet drives are shipped with the eject tone enabled, thus providing an audible tone whenever a cartridge is ejected. Turn the tone off or on with this utility.

Sleep Time Limit: The SyJet drive automatically switches to low power consumption (Sleep mode) after 30 minutes, by default, if the drive is not accessed during this period of time. Use this utility to set the time limit to 10 minutes, 30 minutes, 1 hour, or 3 hours.

Update Drive Firmware: This utility permits updates to the drive's firmware if new features or enhancements are developed for the drive.

To use these utilities:

1. Execute the program SQATPREP.

Windows 95 users: Close all open applications. Then click the appropriate button from SyQuest's Win95 Utility Control panel. Windows 95 will restart your computer in MS-DOS mode and call the SyQuest DOS utility SQATPREP.EXE.

Windows 3.1x users: Use the Alt-F4 keys to exit Windows. Type SQSHELL from a DOS prompt.

DOS users: Simply type SQSHELL from your DOS prompt.

Note: Alternatively, you may run SQATPREP directly from the installation diskette while in DOS. Insert the diskette and enter A:\SQATPREP (or B:\SQATPREP if B: is your 3.5-inch diskette drive).

2. Select the desired item from the menu of options.

B

Managing Drive Letters Under Windows 95

When you add a SyJet drive to your PC, at least one new drive letter is added. Unfortunately, this drive letter may displace drive letters that had been assigned for other devices, and thereby cause problems with your applications. This Appendix gives procedures for changing drive-letter assignments when you add a SyJet EIDE drive to a PC with Windows 95.

Whether To Partition Cartridges

SyQuest cartridges may be either partitioned or non-partitioned.

Partitioning is a way of subdividing hard drives so that they can support multiple operating systems. A hard drive (cartridge) may be divided into zero, one, two, three, or four partitions. Although there are numerous types of partitions, Windows 95 maps any partition into one of these types:

- Non-DOS
- Primary
- Extended

Windows 95 allows zero or one primary partitions and zero or one extended partitions. A primary partition is assigned one drive letter. An extended partition may be subdivided into multiple logical volumes. Each logical volume in the extended partition is assigned one drive letter. A formatted non-partitioned SyQuest cartridge is assigned one drive letter.

Personal computers store information about their components (hard drives, diskette drives, serial/parallel ports, etc.) in their CMOS (low power consuming memory) table. SyQuest drives that are correctly defined in the CMOS table are assigned:

- One permanent (not reassignable) drive letter for each primary partition
- One permanent drive letter for each logical volume in an extended partition on the cartridge loaded in the SyQuest drive at boot time

Under Windows 95, you *cannot* change these drive letters.

Currently, all SyQuest cartridges are shipped from the factory with one primary partition. Users that need only a single drive letter for their SyQuest cartridge can do either of the following to create a reassignable drive letter for their SyQuest cartridge:

- Boot with no cartridge in the drive.
EZFlyer EIDE and SyJet EIDE drives *support* this feature. This feature is *not supported* by SyQuest 3270 or 3105 IDE drives, or by EZ135 IDE drives.
- Boot with a non-partitioned cartridge in the drive.

Creating a Non-Partitioned Cartridge

Note: Skip this section if you have a SyJet EIDE or EZFlyer EIDE drive. Boot with no cartridge in the drive. Go to the next section, "Changing a Windows 95 Drive Letter."

Warning: This procedure will destroy all data currently on the cartridge. Prior to using this procedure, copy all data that you wish to preserve to either your hard drive or another SyQuest cartridge.

- 1.** Install SyQuest's Windows 95 software and bonus application software.
Do not install the software on the SyQuest cartridge.
- 2.** Run FDISK.
 - a. Click Start, select Programs, and click on the MS-DOS prompt.
 - b. From the MS-DOS prompt, type FDISK and depress the Enter key.
 - c. Select option 5 to change the current fixed disk drive, and then select the SyQuest drive.
 - d. Use option 3 to delete the partition or logical DOS drive.
 - e. After your system restarts, double-click My Computer.
- 3.** Right-click on the SyQuest removable drive icon, and select Format from the menu to format the cartridge.

Changing a Windows 95 Drive Letter

1. From Control Panel, double-click the System icon.
2. Click the Device Manager tab and double-click the disk-drive entry.
3. Select the entry for the SyJet EIDE drive, usually the entry Generic IDE Disk Type02.
4. Look in the Current Drive Letter Assignment box for the drive letter(s) assigned to the SyQuest drive.
5. Use the Reserve Drive Letter click box to change the drive letter.

Note: You must always start your SyJet drive with either no cartridge or a non-partitioned cartridge in the drive. If you start Windows 95 with a partitioned cartridge in the drive, your computer will assign different, permanent drive letter(s). To fix this problem, restart Windows 95 with either no cartridge or a non-partitioned cartridge in the SyJet drive.

1

Getting Started

This chapter provides an overview and describes the hardware and software you need to install a SyJet™ 1.5 GB EIDE drive. It also describes the tools you need for installation, and recommends safety practices to use.

Overview

SyJet EIDE drives follow the Enhanced Intelligent Drive Electronics (EIDE) standard. This standard defines an electrical interface used to attach hard drives, CD-ROMs, DVDs, or tape drives to your computer.

You can attach devices to either the primary or secondary EIDE port. Each port provides a 40-pin electrical interface. A flat two-inch (five centimeter) ribbon cable connects an EIDE device (for example a SyJet 1.5 GB drive) to the EIDE port. You can attach up to two EIDE devices to an EIDE port. Most Pentium class computers have the primary and secondary EIDE ports built into the motherboard. However, some computers use EIDE add-on cards.

Note: Non-Pentium class machines typically support the earlier IDE standard. This standard defines a single IDE port that supports the attachment of up to two IDE devices. Although you can attach SyJet EIDE drives to an IDE controller, you may experience degraded capacity or performance. If you have an IDE controller, SyQuest recommends that you replace it with an EIDE controller if you can, and attach the SyJet EIDE drive to an EIDE controller.

EIDE devices must be set to either Master or Slave mode. When attaching a single device to an EIDE port, the drive must be set to Master mode. When attaching two devices to an EIDE port, one must be set to Master mode, while the other must be set to Slave mode. Some EIDE devices that are set to Master mode (for example, some models of Seagate™, Maxtor™, or Conner™ hard drives) require still a different setting when a Slave device is attached to the same cable. The master device on the primary EIDE port is usually your computer's boot device, the device that contains your computer's operating system.

Note: SyQuest EIDE drives and most CD-ROMs now support the ATAPI (Advanced Technology Attachment Packet Interface) standard. Your computer's documentation probably refers to CD-ROMs that attach to an EIDE interface as *ATAPI CD-ROMs*.

Figure 1-1 shows examples of EIDE and IDE motherboards and an EIDE add-on card. EIDE controllers have both primary *and* secondary interface ports. IDE controllers have only a single interface port.

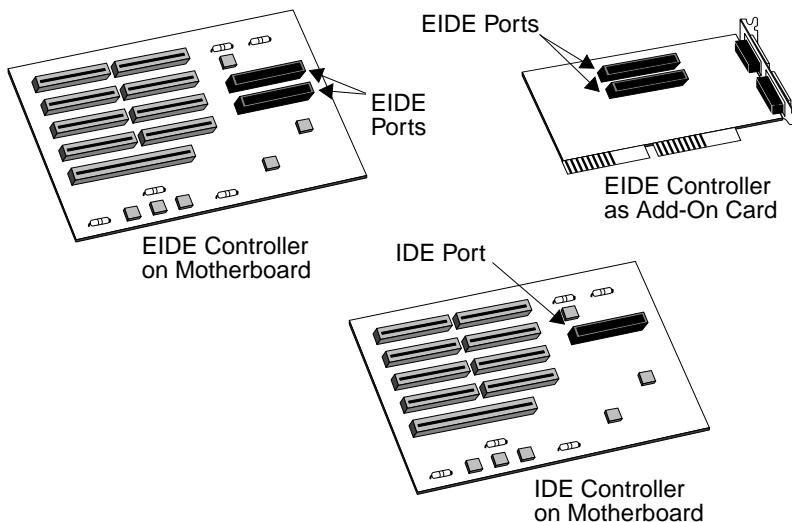


Figure 1-1 Examples of EIDE and IDE Controllers

Basic Requirements

This installation guide provides generalized procedures for installing the SyJet EIDE drive. The installation requires some familiarity with computer hardware and software, and typically takes one to two hours.

You *will* have to open up your computer and properly mount and attach the Syjet drive. You *may* have to remove or relocate your hard drive, CD-ROM, or DVD, depending on the location of these devices. These tasks require a moderate level of mechanical skill.

If you feel comfortable about performing the required tasks, please read this guide carefully and follow *all* of its instructions.

For Less Experienced Installers

First read this guide. Consult your authorized SyQuest reseller if:

- You feel uncomfortable about performing the required tasks.
- You begin the installation and find that your PC configuration is too difficult to tackle.

Your SyQuest reseller can give you a list of local computer-service companies that will install your SyJet EIDE drive for a fee.

For More Experienced Installers

If you are very familiar with this type of installation and wish only to have pointers to key requirements, here is a ***quick guide***:

1. **Carefully read the sections “Required Hardware” and “Required Software” in this chapter.**
2. ***If you use Windows 95, run SyQuest’s ADDIDE95 program as instructed on page 2-5.***
3. **Set the correct jumper settings as described under “Set Jumpers on EIDE Devices” on page 2-16.**
4. **Use the CMOS settings given on page 2-32.**

5. Find the section on your operating system in Chapter 3 and install the SyQuest device drivers and utilities.

Required Hardware

You need the following hardware to install the SyJet EIDE drive:

- A 386TM, 486TM, or PentiumTM class desktop or tower computer
- An EIDE controller (on the motherboard or as an add-on card)
If you use an IDE controller, you may experience degraded capacity or performance.
- A 40-pin cable that is long enough and has a free connector for the SyJet EIDE drive
- An empty 3.5-inch or 5.25-inch mounting bay

Note: *If you intend to use an empty 5.25-inch mounting bay*, you may need some accessory hardware. SyJet EIDE drives are shipped in 5.25-inch mounting boots. Many computers require custom mounting rails that attach to the sides of this mounting boot. SyQuest cannot provide these rails, but your computer manufacturer may have already provided or may be able to provide these rails for your computer. Please contact your computer manufacturer regarding the availability of this accessory hardware.

Caution: *If you intend to use an empty 5.25-inch mounting bay*, a few computer manufacturers (for example, DellTM and CompaqTM) require special 5.25-inch mounting trays or enclosures in some of their computer models. This hardware may not allow enough space for the 5.25-inch mounting boot of the SyJet EIDE drive. You may not be able to install the drive in an empty 5.25-inch mounting bay in these machines. (Your computer manufacturer can inform you about any such mounting restrictions.) Instead, follow this guide's instructions for removing the mounting boot and using a 3.5-inch mounting bay if you have one available.

Required Software

SyQuest supports these operating systems with the SyJet EIDE drive:

- Windows 95 (all versions)
- Windows NT 4.0 with Service Pack2 or higher
- Windows 3.1x
- OS/2 2.1 or higher
- PC-DOS 5.0 or MS-DOS 5.0 or higher
- Novell DOS 7.0 or higher

Windows NT 3.5x supports the SyJet drive as a *fixed* drive only. If you use version 3.5x or an earlier version of Windows NT, you must first close all programs and shutdown Windows NT before you can remove a cartridge.

Note: SyJet EIDE drives do *not* work with Macintosh or notebook computers. If you have a Macintosh or notebook computer, contact your authorized SyQuest reseller for instructions on exchanging the drive for one that is compatible.

Required Tools

In addition to your computer manuals, you will need the tools shown in Figure 1-2 to install the drive.

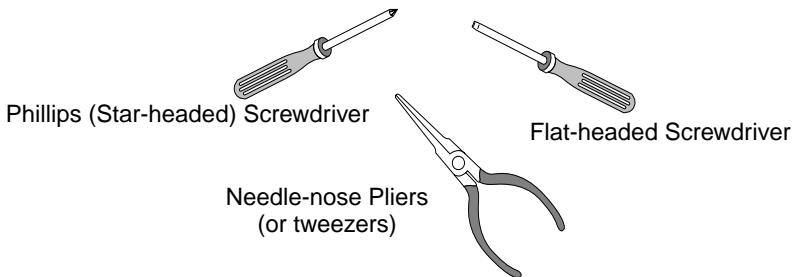


Figure 1-2 Tools Needed for Installation

Safety Practices

While working inside your computer, use caution to avoid damaging the computer or injuring yourself:

- *Always* turn off the computer and unplug the power cord.
- If you use a magnetic screwdriver, be sure to keep the screwdriver at least three inches away from diskettes and SyQuest cartridges. The magnetic field can damage disks.
- Be sure to keep all metal objects such as screwdrivers and screws away from electronic circuitry within the computer. If a screw drops into your computer, remove it immediately.
- Periodically touch the metal frame of the computer to reduce static electricity buildup. In cold, dry climates, use an electrostatic discharge wristband.

2

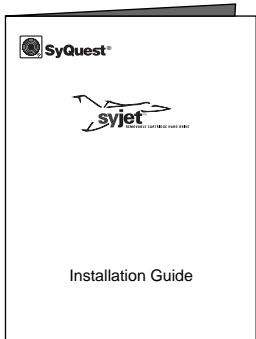
Installing the SyJet EIDE Drive

The following sections give instructions for installing your SyJet drive—from unpacking the shipping carton and preparing the hardware, to completing the hardware installation and verifying your drive's performance.

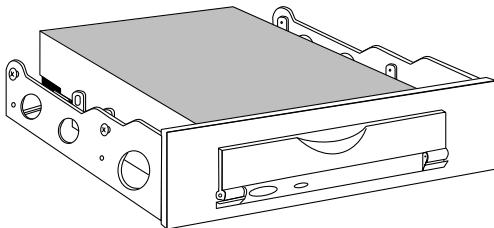
Prepare Your SyJet Drive

1. Unpack your SyJet drive.

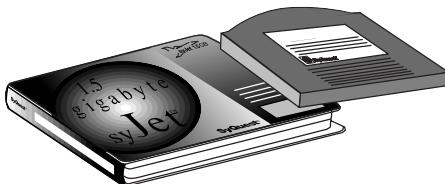
Open and inspect the shipping carton for the contents shown in Figure 2-1:



Installation Guide



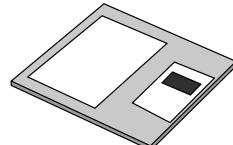
SyJet Removable Cartridge Disk Drive
in optional 5.25-inch Mounting Boot



SyJet Cartridge in
Protective Case



Mounting Screws



Installation Diskette

Figure 2-1. SyJet Drive Package Contents

2. Study the parts of your SyJet drive.

Familiarize yourself with the features shown in Figure 2-2 and Figure 2-3:

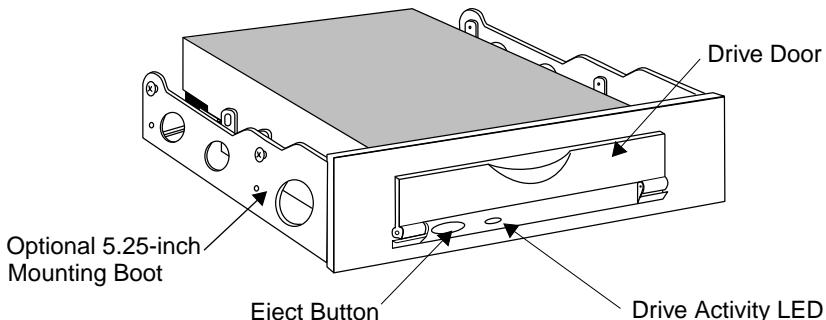


Figure 2-2. SyJet Drive Front View (with mounting boot)

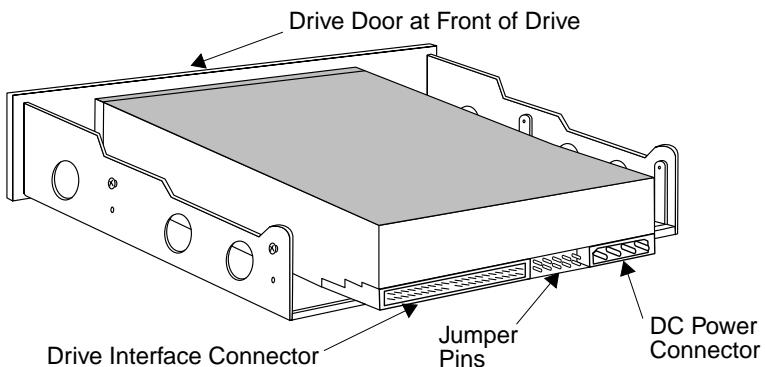


Figure 2-3. SyJet Drive Rear View (with mounting boot)

Note: The jumper pins on most SyJet EIDE drives are located at the back of the drive as shown in Figure 2-3. However, on some SyJet EIDE drives, the jumper pins are located on the bottom of the drive, as shown in Figure 2-12 on page 2-18. The jumper pins in either location are functionally equivalent.

Prepare Your Computer

1. Inspect the outside of your computer for an unused 3.5-inch or 5.25-inch mounting bay.

Bays that are unused have removable plastic or metal covers that are located next to diskette, CD-ROM, or DVD drives.

Caution: Do *not* open your computer or remove the mounting bay cover yet.

Some computers provide both 3.5-inch and 5.25-inch mounting bays. The SyJet EIDE drive can use a mounting bay of either size.

Figure 2-4 shows typical locations of unused mounting bays.

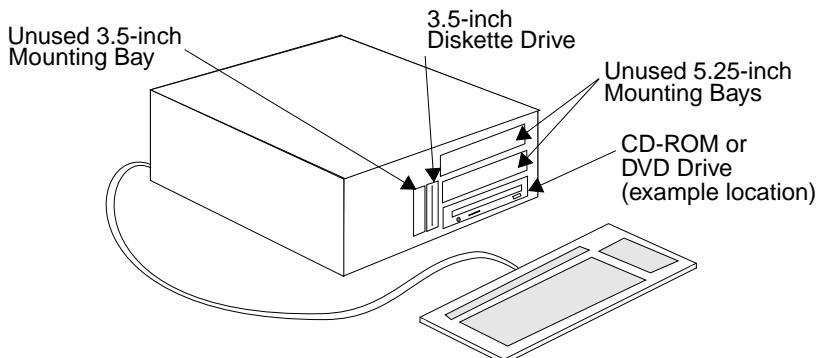


Figure 2-4. Finding an Unused Mounting Bay

If all of your mounting bays are in use, you can remove a device currently using a mounting bay. For example, you may wish to remove a 5.25-inch diskette drive. Since nearly all software is currently distributed on CD-ROMs, DVDs, or 3.5-inch diskettes, 5.25-inch drives are becoming less useful. If you need help removing a diskette drive, please contact your authorized SyQuest reseller.

2. Windows 95 users: run the ADDIDE95 program.

Insert the SyQuest installation diskette into your diskette drive. From Start, select Run and type A:\ADDIDE95.EXE (or B:\ADDIDE95.EXE if B: is your 3.5-inch diskette drive letter). Press the OK button.

This program updates your SYSTEM.INI file by adding the statement RemovableIDE=TRUE in the subsection [386Enh].

Open Up Your Computer

1. Shut down your operating system and turn off the computer.

Locate the computer's power-off button and turn off the computer. Power-off buttons vary from computer to computer. Many computers use push buttons while others use rocker switches labeled O for Off and | for On.

2. Touch the computer to discharge any electrostatic buildup.

3. Disconnect the AC power cord from the wall outlet.

4. Open your computer's case.

Caution: Once you have removed the cover, touch the metal frame of the computer to prevent electrostatic damage to the electronic components.

Most computers use several screws in the back to attach a top cover to the computer frame. The cover either lifts off or pulls off from the front. Other computers have a removable front panel that is anchored by screws or plastic tabs. Refer to your computer manual for instructions on removing the computer's cover or front panel.

Figure 2-5 shows a typical desktop PC. Figure 2-6 shows a typical tower PC.

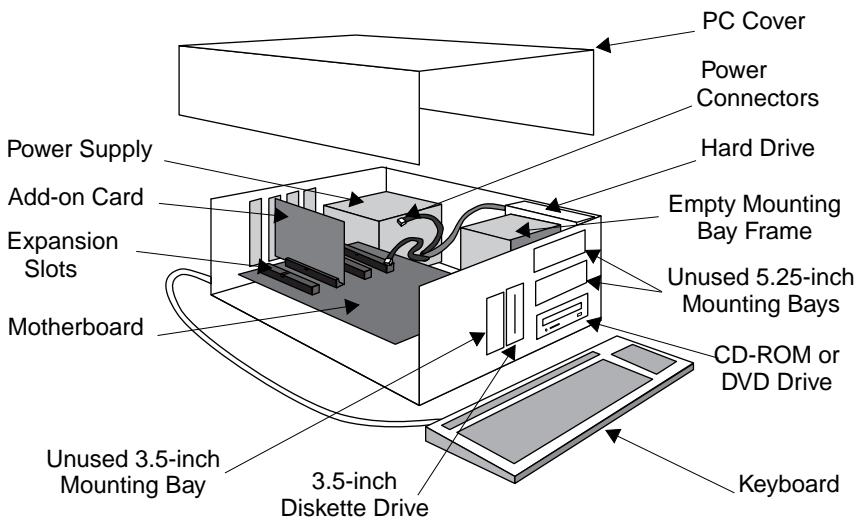


Figure 2-5. Removing the Cover of Your Computer (desktop model)

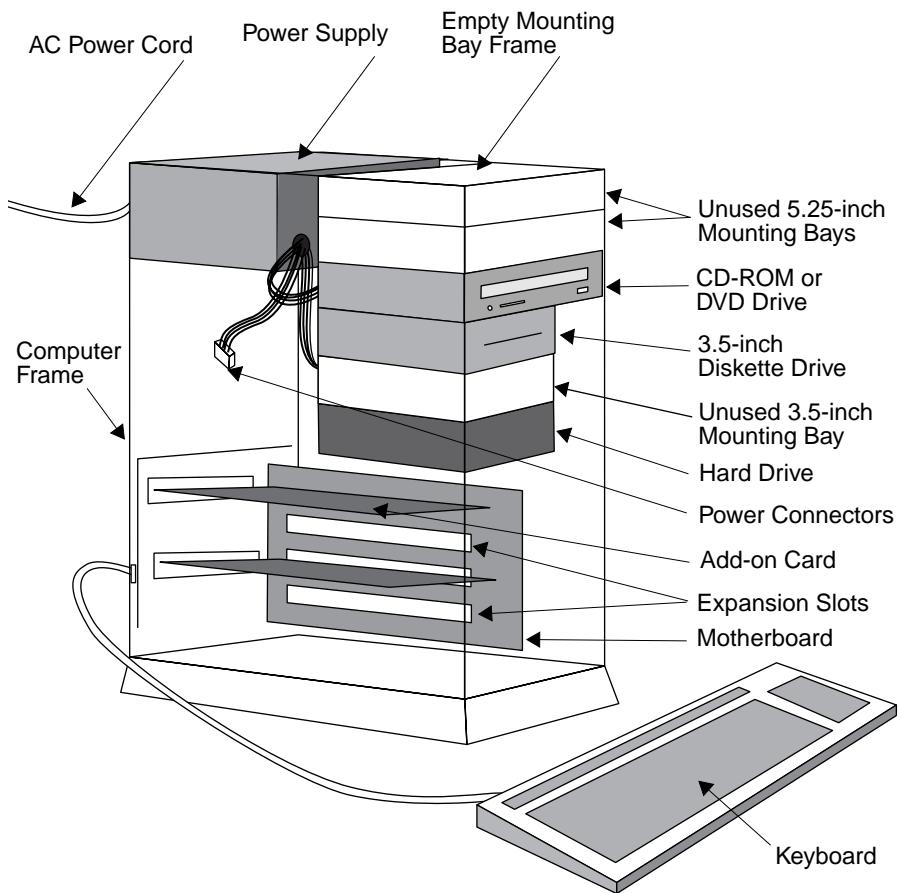


Figure 2-6. Typical Tower PC Components

Verify Your EIDE/IDE Configuration

1. Locate your EIDE hard drive.

Figure 2-7 and Figure 2-8 show the location of EIDE/IDE ports and the EIDE hard drive on typical computers. An EIDE hard drive will always be connected to your computer's power supply and to an EIDE/IDE port.

Locate your computer's hard drive and verify that it is attached with a 40-pin EIDE ribbon cable about two inches or five centimeters wide.

Note: Do not be confused by other wider or narrower ribbon cables in the computer that are used to connect other devices.

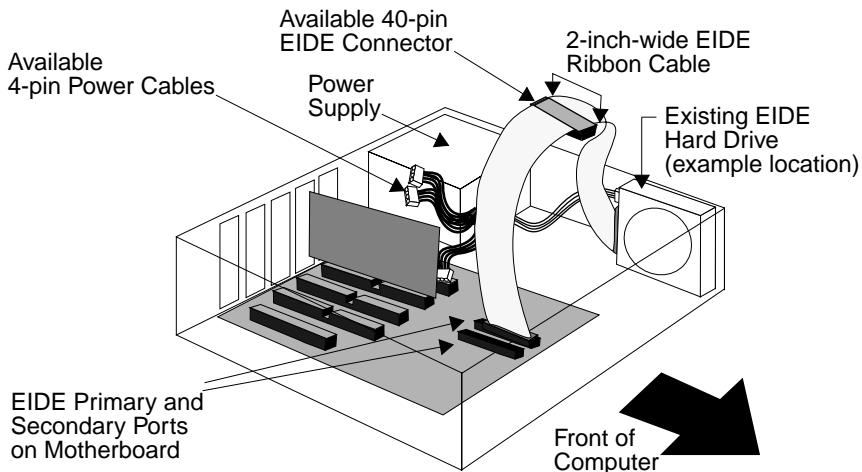


Figure 2-7. 40-pin EIDE Ribbon Cable Attached to the Computer's Motherboard

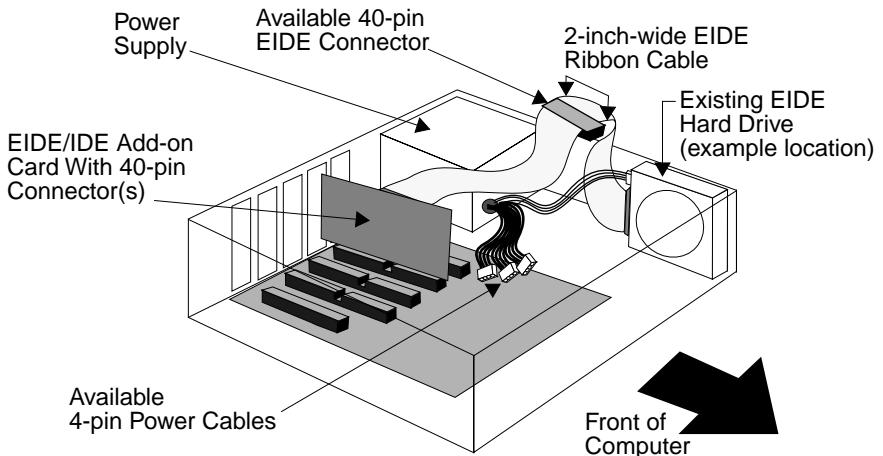


Figure 2-8. 40-pin EIDE Ribbon Cable Attached to an EIDE Add-On Card

2. Locate your EIDE/IDE controller port(s).

Follow the 40-pin EIDE cable from your computer's hard drive to the 40-pin EIDE/IDE controller port. The port connector is located on either your computer's motherboard or EIDE/IDE add-on card.

If you find two ports located side by side or one above the other, you have an EIDE controller. If you find only one port, you have an IDE controller. Figure 1-1 on page 1-2 shows enlarged views of EIDE and IDE motherboards and an IDE add-on card.

Note: Some computers use only SCSI (Small Computer System Interface) controllers for attaching drives. SCSI controller ports have either 50-pin or 68-pin connectors for attaching ribbon cables. A 50-pin ribbon cable is about 2.5-inches wide. If your computer supports only a SCSI interface, please exchange your SyJet EIDE drive for a SyJet SCSI drive.

3. Locate all devices attached to your EIDE/IDE port(s).

If your PC has an EIDE CD-ROM or DVD drive, you may find that it is attached to the same ribbon cable as your hard drive. Or, the CD-ROM or DVD drive may be attached to a secondary EIDE port. Also, you may find other attached EIDE devices such as another hard drive or a tape drive.

Please fill in Table 2-1. Your computer's boot drive is usually the master device on the primary EIDE cable. If you find only one device on an EIDE cable, it is always the master device.

Table 2-1 Existing EIDE Devices in Your Computer

Existing Configuration	Master Device	Slave Device
Primary EIDE Port (or Single IDE Port)		
Secondary EIDE Port		

Note: If you already have two devices attached to an IDE port, you must either remove one of the existing devices, or purchase a replacement EIDE controller. Please consult your authorized SyQuest reseller for guidance.

Decide Where To Install the SyJet Drive

SyJet EIDE drives may be installed as either a master or a slave drive on any EIDE or IDE port. Typical configurations include installing the SyJet drive as:

- The master drive on the secondary EIDE port
- The slave drive to your hard drive on the primary EIDE port
- The slave drive to a master device on a secondary EIDE port

The physical location of your computer's unused mounting bay(s), its hard drive(s), other EIDE devices, and your computer's CMOS Set up program determine how and where to install the SyJet EIDE drive.

Please refer to Table 2-1 and match your existing configuration to one of the five cases that follow.

Case 1	Master Device	Slave Device
Primary EIDE Port (or Single IDE Port)	Your Boot Drive	Empty
Secondary EIDE Port	Empty	Empty

Case 1. If your operating system is Windows 95, Windows NT, or OS/2, SyQuest recommends that you install the SyJet drive as the master drive on the secondary EIDE cable. If you have an IDE controller, or if your operating system is Windows 3.1x, SyQuest recommends that you install the SyJet drive as the slave device to your hard drive.

Windows 3.1x supports 32-bit access only on the primary EIDE port. If you install the SyJet drive on the secondary port, you will probably have to use 16-bit access, resulting in slower performance.

Case 2	Master Device	Slave Device
Primary EIDE Port	Your Boot Drive	CD-ROM or DVD
Secondary EIDE Port	Empty	Empty

Case 2. Install your SyJet drive as the master drive on the secondary EIDE cable.

If you are using Windows 3.1 and wish to use 32-bit access, you must remove your CD-ROM or DVD drive from the primary EIDE cable, change its jumper settings to Master, and install it on the secondary EIDE cable. Then install the SyJet drive as the slave drive on the primary EIDE cable.

Case 3	Master Device	Slave Device
Primary EIDE Port (or Single IDE Port)	Your Boot Drive	Empty
Secondary EIDE Port	CD-ROM or DVD	Empty

Case 3. SyQuest recommends that you install the SyJet drive as the slave device to your boot drive. If the distance between your boot drive and the available mounting bay is greater than 8 inches (20 centimeters), you may have to install the SyJet drive on the secondary EIDE cable.

Most computer BIOS' that are currently being shipped support the installation of a SyJet EIDE drive as the slave device to a CD-ROM or DVD drive. Most computers built before 1996 require that you install the SyJet EIDE drive as the master device on the secondary EIDE port. In this case, you must change the CD-ROM or DVD drive to a slave device.

Case 4	Master Device	Slave Device
Primary EIDE Port	Your Boot Drive	Another EIDE Device
Secondary EIDE Port	CD-ROM or DVD	Empty

or

Primary EIDE Port	Your Boot Drive	Empty
Secondary EIDE Port	Another EIDE Device	Another EIDE Device

Case 4. Install your SyJet drive as the slave device on the EIDE port that does not have a slave device already installed. If the master device on the secondary port is a CD-ROM or DVD drive, SyQuest recommends that you install the SyJet drive as the master device on the secondary EIDE port and change the CD-ROM or DVD drive to a slave device.

Computers built before 1996 did not support hard drives as slave devices to a CD-ROM or DVD drive. Most computers now being manufactured do not have this limitation.

Case 5	Master Device	Slave Device
Primary EIDE Port	Your Boot Drive	Another EIDE Device
Secondary EIDE Port	Another EIDE Device	Another EIDE Device

or

Single IDE Port	Your Boot Drive	Another EIDE Device
-----------------	-----------------	---------------------

Case 5. You have no space available for mounting the SyJet drive. You must either remove a current device and replace it with the SyJet EIDE drive, or update your computer's hardware.

If you have an IDE controller, SyQuest recommends that you replace it with an EIDE controller. Please consult your authorized SyQuest reseller for additional guidance (for example, on the alternative use of SyQuest SCSI or Parallel Port drives).

Prepare the Mounting Bay and Cabling

You are now ready to begin installing your SyJet EIDE drive. If you have multiple unused mounting bays and plan to share the interface cable with another EIDE device, select the unused mounting bay closest to the shared device.

1. Remove the mounting-bay cover from the unused 3.5-inch or 5.25-inch mounting bay.

You can mount the drive either horizontally or vertically, but *not* upside down. Remove the blank plastic or metal mounting-bay cover from the cover (or front panel) of your computer. Some covers are held in place by screws, while others use plastic tabs.

2. Install an 18-inch EIDE ribbon cable if needed.

Most computer systems with an EIDE controller already include one or two EIDE cables with three connectors and of sufficient length. If your computer is an exception, you may need to obtain an 18-inch EIDE cable that has three connectors, as shown in Figure 2-9.

Note: Eighteen inches is the maximum length permitted by the EIDE standard. It provides connectors for attaching two EIDE devices to an EIDE port.

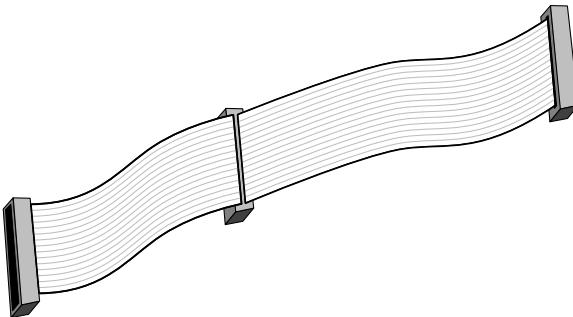


Figure 2-9. Eighteen-inch EIDE Cable With Three Connectors

Install an 18-inch EIDE cable if one of these situations applies:

- You are installing the SyJet drive as the master device on the secondary EIDE port. No cable is currently attached to the secondary port. (Use step d of the following procedure.)
- You are installing the SyJet drive as the slave device on an EIDE cable. The existing cable has only two connectors, or the cable is too short to reach both the SyJet drive and the master EIDE device. (Use the following procedure.)

To replace an existing EIDE ribbon cable:

a. Locate the existing cable.

Note the orientation of the striped or colored edge (pin 1) of the cable relative to the 40-pin connector on the EIDE controller.

b. Undo the existing cable from the EIDE controller port.

c. Fold the new cable in half lengthwise so that the two ends touch.

Observe that one half of the ribbon cable has two 40-pin connectors, while the other half has only one 40-pin connector (at its end).

d. Attach the end of the new cable that has one 40-pin connector to the appropriate EIDE or IDE controller port.

Be sure to attach the striped edge of the ribbon cable to pin 1 of the 40-pin connector of the EIDE or IDE controller. Check that the orientation matches the orientation you noted in step a. If you are still unsure of the correct orientation, see Figure 2-16 on page 2-25.

e. Locate the master device attached to the other end of the existing cable.

Observe the orientation of the striped edge (pin 1) of the cable relative to the 40-pin connector on the master EIDE device.

f. Remove the existing cable from the master EIDE device.

g. Connect either of the two available 40-pin connectors on the new cable to the master EIDE device.

Be sure to attach the striped edge (pin 1) of the cable to pin 1 of the EIDE device.

Note: Do not attach the SyJet drive yet. You must first set jumpers on the EIDE devices and properly mount the SyJet drive.

Set Jumpers on EIDE Devices

You may need to reset the Master/Slave jumper on the SyJet EIDE drive, and also the jumpers on your existing EIDE devices.

Jumpers are commonly used by manufacturers to control hardware settings:

- A jumper is set to On position when it connects two jumper pins in different rows.
- A jumper is set to Off position when it does not connect two jumper pins.

Note: Never connect two jumper pins in the same row—always connect pins in different rows, as shown in Figure 2-10.

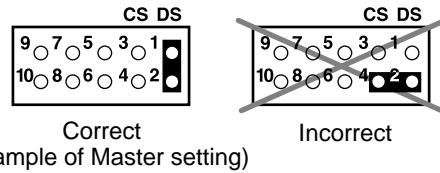


Figure 2-10. Using the Jumper Pins Correctly

1. Set the SyJet EIDE drive to either Master or Slave.

To set the SyJet drive to Master, use a jumper to connect the master/slave pin set. This is the default setting (*with jumper installed*) when the SyJet EIDE drive is shipped.

To set the SyJet drive to Slave, place the jumper on only one pin of the master/slave pin set (or remove it entirely).

Figure 2-11 and Figure 2-12 show the correct pins to connect to set the SyJet drive to Master, Slave, or Cable Select.

Caution: Do not use jumper pins identified as *factory reserved* in Figure 2-11 and Figure 2-12. This could cause erratic drive behavior, including loss of data.

SyQuest recommends using the master/slave pin set for setting the SyJet EIDE drive to Master or Slave. Some PCs support Cable Select as an alternative way of setting drives to Master or Slave. However, the Cable Select setting requires special hardware and a special installation procedure, and is therefore not recommended for end users. Refer to your PC's documentation for additional details.

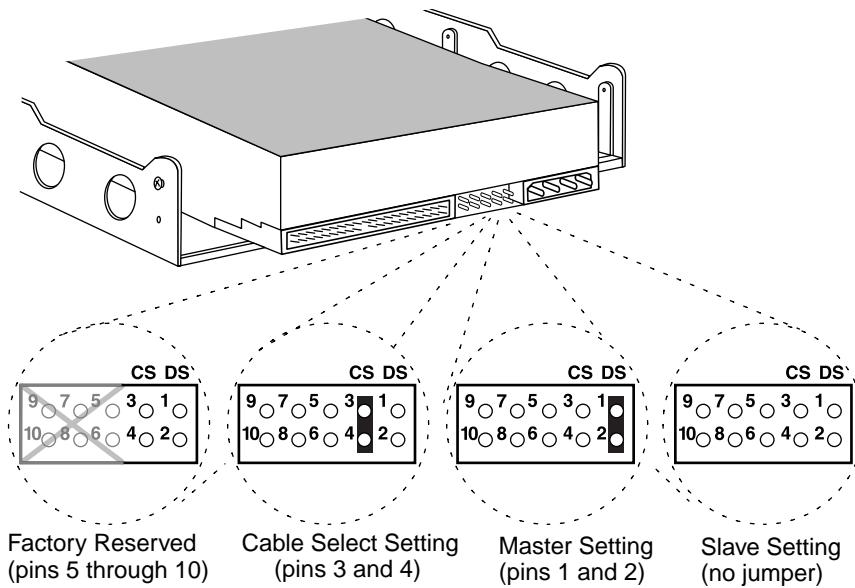
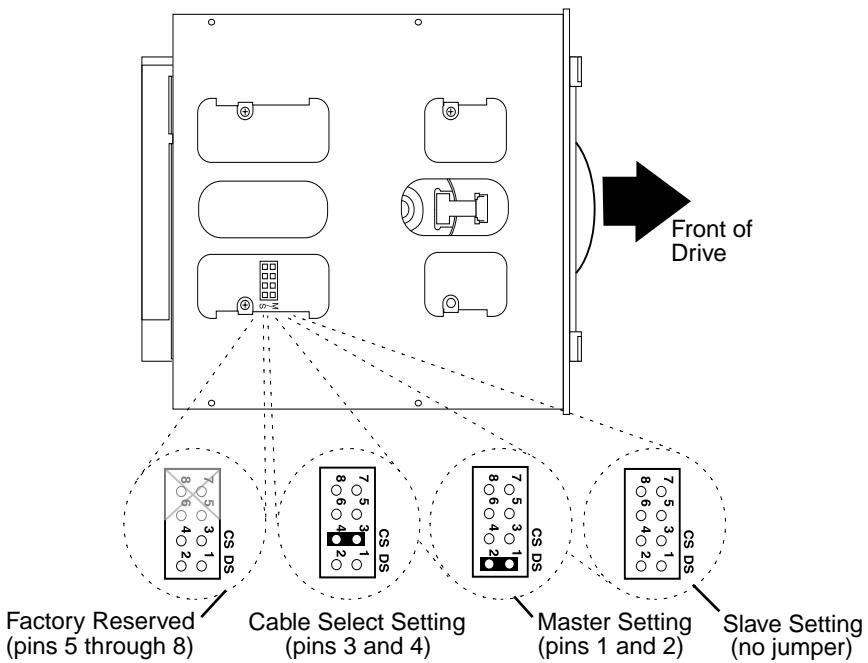


Figure 2-11. Jumper Positions on Most SyJet Drives (rear view)

The jumper pins (a total of 10) on most SyJet EIDE drives are located on the back edge of the PCBA between the EIDE drive connector and the DC power connector, as shown in Figure 2-11. Pin 1 is the upper-row pin nearest to the DC power connector.

See Figure 2-12 if you do not find the jumper pins at this location.



**Figure 2-12. Jumper Positions on Some SyJet EIDE Drives
(underside view)**

The jumper pins (a total of 8) on some SyJet EIDE drives are located on the bottom of the drive, on the PCBA behind the EIDE drive connector as shown in Figure 2-12. The label M/S (Master/Slave) is silk-screened next to pins 1 and 2.

See Figure 2-11 if you do not find the jumper pins at this location.

2. Set the jumper pins on your existing EIDE devices.

Note: Skip this section if you are installing the SyJet EIDE drive as the only device on an EIDE cable.

If you are installing the SyJet EIDE drive as the *slave* device to a hard drive, you may need to change the jumper settings on your hard drive. Many hard drives built by Seagate™, Maxtor™, and Conner™ prior to 1996 use a special jumper-pin setting to tell the drive that a slave device is also attached to the cable. Please refer to the manufacturer's documentation, Web site, or fax-on-demand number for more information.

Note: Always record the current location of the jumpers on your existing hard drive *before* changing the position of any of the jumpers.

To change the jumper-pin setting of your existing hard drive, usually you need to remove the drive from its mounting bay. Be sure to record the orientation of the striped or colored edge of the EIDE cable to the drive's 40-pin connector.

Some manufacturers use special screws to mount their drives. If you have difficulty, please call your computer manufacturer's technical support specialists or use their Web site for guidance.

If you are installing the SyJet 1.5 GB EIDE drive as the *master* device to a CD-ROM or DVD drive that had previously been set to Master, change the setting of the CD-ROM or DVD drive to Slave. Most CD-ROMs provide documentation on the outside of the drive describing how to set Master and Slave modes. Otherwise, please refer to the manufacturer's documentation, Web site, or fax-on-demand number for more information.

Note: Some computer BIOS' require that you always install CD-ROM or DVD drives as slave devices to hard drives. To avoid any problem with these computer BIOS', SyQuest recommends that you always install your SyJet EIDE drive as the master device to a CD-ROM or DVD drive.

Mount the SyJet Drive in the Bay

Under “Prepare the Mounting Bay and Cabling” on page 2-13, you chose a mounting bay for installing the SyJet drive and removed the mounting bay cover.

If you chose a 3.5-inch bay, use the procedure “To Install in a 3.5-Inch Bay” on page 2-21. If you chose a 5.25-inch bay, use the procedure “To Install in a 5.25-Inch Bay” that follows.

To Install in a 5.25-Inch Bay

- 1. Slide the SyJet mounting boot (with drive) directly into the bay and verify that the selected cable reaches.**

Insert the drive through the front opening of the mounting bay.

Position the drive and verify that the cable you selected for attaching the SyJet drive reaches the interface connector at the back of drive.

Note: Do *not* attach the interface cable at this time unless you will be unable to reach the back of the drive after it is fully mounted.

If the cable does not reach, you must either relocate other EIDE devices, or use another mounting bay. Go back to “Decide Where To Install the SyJet Drive” on page 2-10 if you must install the SyJet drive on another EIDE cable.

- 2. Verify that the SyJet mounting boot works with your 5.25-inch mounting bay.**

Your SyJet drive is shipped in a plastic 5.25-inch mounting boot. Mounting bays vary, depending on the computer manufacturer:

- You may need to attach rails to the SyJet mounting boot to secure the drive to your computer’s 5.25-inch bay. These rails are sometimes provided as accessories with your computer. If not, please contact your computer manufacturer to obtain the appropriate rails.

- You may need to remove the front faceplate of your computer, or remove other mounting hardware. Refer to your computer's documentation for additional guidance.

Note: Some Compaq™ and Dell™ computer models require special mounting trays for mounting 3.5-inch drives in their 5.25-inch mounting bays. Contact the computer manufacturer to obtain these 5.25-inch mounting trays.

3. Screw the SyJet mounting boot (with drive) to the mounting bay.

Use the four self-threading (pointy) screws provided (in a plastic bag) by SyQuest. Using two screws on each side, attach the mounting boot (with drive) to the 5.25-inch mounting bay, or to the special rails or tray that you install as needed. Do *not* fully tighten the screws just yet.

4. Align the front of the SyJet drive assembly with the other devices and tighten all screws.

If you need to use rails or a tray, be sure to secure this hardware in your computer. Be careful not to overtighten the screws. As soon as you feel resistance, stop tightening.

To Install in a 3.5-Inch Bay

1. Remove the SyJet drive from its mounting boot.

Your SyJet drive is shipped in a plastic 5.25-inch mounting boot. Separate the boot from the drive by removing the three machine screws that secure it to the drive, as shown in Figure 2-13. For an underside view of the screw locations, also see Figure 2-12 on page 2-18.

Keep these three machine screws—you will need to use them in step 3 of this procedure.

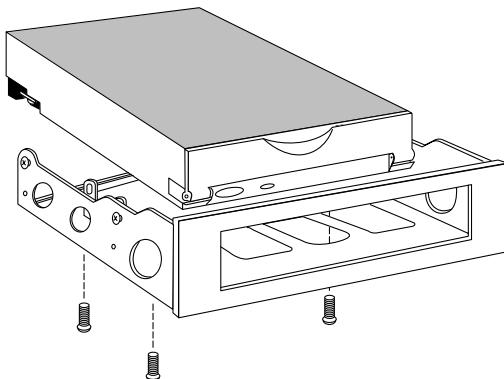


Figure 2-13. Removing the Mounting Boot and Three Screws (front view)

2. Slide the SyJet drive directly into the bay and verify that the selected cable reaches.

Insert the drive through the front opening of the mounting bay. Position the drive and verify that the cable you selected for attaching the SyJet drive reaches the interface connector at the back of drive.

Note: Do *not* attach the interface cable at this time unless you will be unable to reach the back of the drive after it is fully mounted.

If the cable does not reach, you must either relocate other EIDE devices, or use another mounting bay. Go back to “Decide Where To Install the SyJet Drive” on page 2-10 if you must install the SyJet drive on another EIDE cable.

3. Screw the SyJet drive to the mounting bay with three machine screws.

Use the three screws that previously attached the mounting boot to the drive. Install two screws on one side of the drive and one screw on the other side, as shown in Figure 2-14. Do *not* fully tighten the screws just yet.

Note: Some computer manufacturers require special mounting rails for 3.5-inch drives. Contact your computer reseller for an appropriate kit if needed. It is important to mount the SyJet drive securely.

Caution: Do *not* use any screws other than the three provided.

4. Align the front of the SyJet drive assembly with the other devices and tighten all screws.

Be careful not to overtighten the screws. As soon as you feel resistance, stop tightening.

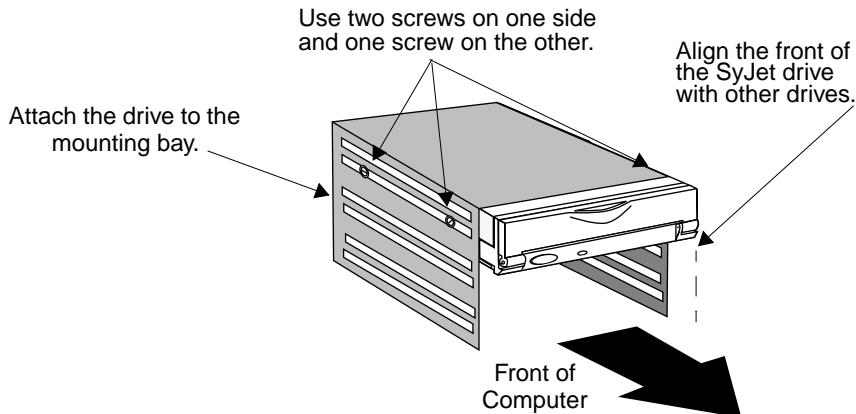


Figure 2-14. Mounting the Drive in a 3.5-inch Mounting Bay

Connect the Cables

1. Connect your SyJet drive to the EIDE ribbon cable.

Under “Decide Where To Install the SyJet Drive” on page 2-10, you determined an appropriate EIDE/IDE port for the SyJet drive. Later, under “Prepare the Mounting Bay and Cabling” on page 2-13, you installed a new 18-inch EIDE cable if needed.

Now select a free 40-pin connector on the chosen EIDE cable and attach it to the SyJet drive. Be sure that the striped edge of the EIDE cable attaches to pin 1 of the SyJet drive as shown in Figure 2-15.

If you already installed an 18-inch cable, and you still cannot reach the SyJet drive, try switching the devices on the EIDE cable. You can attach a master device, slave device, and the EIDE/IDE controller port in any order to the connectors on the cable.

If you are still unable to connect all the devices, you will need to move other EIDE devices or your diskette drive. Consult your authorized SyQuest reseller for additional guidance.

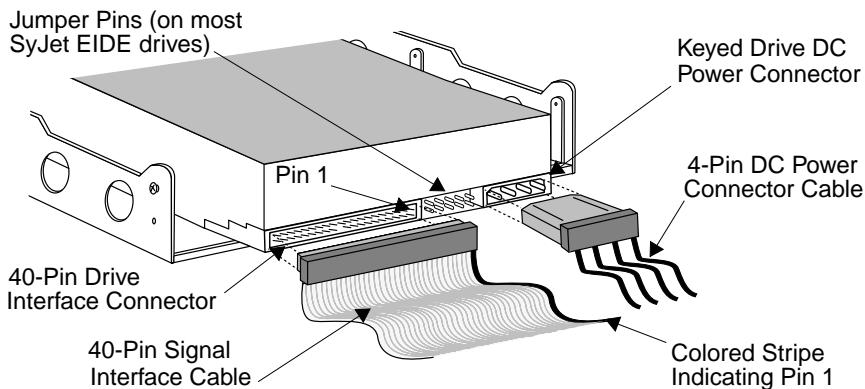


Figure 2-15. Close-up View of Cables Connected to the SyJet Drive (showing drive in 5.25-inch mounting boot)

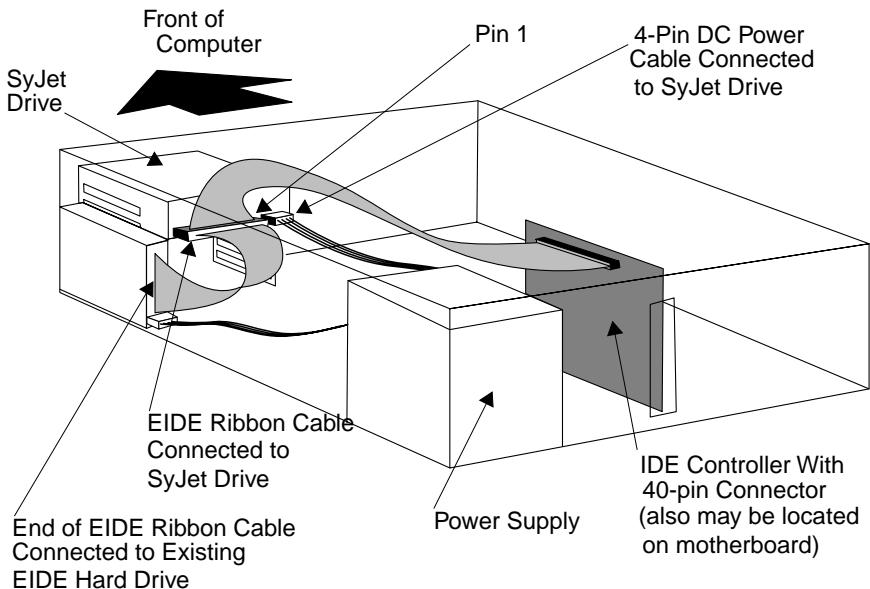


Figure 2-16. Connecting the Cables (showing 5.25-inch mount)

2. Connect a 4-Pin DC power connector to the SyJet drive.

Locate an unused 4-pin DC power connector. Power cables are attached to the computer's power supply and have rectangular end connectors. Two corners of the connector are angled so that it can be attached in only one orientation, as shown in Figure 2-17.

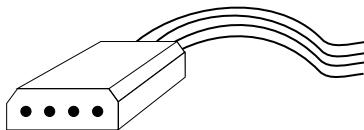


Figure 2-17. DC Power Connector (end view)

If there are no available 4-pin DC power connectors in your computer, you can purchase a Y power adapter from your computer reseller. A Y power adapter converts a single 4-pin DC power connector into two 4-pin DC power connectors. See Figure 2-18.

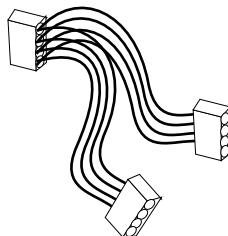


Figure 2-18. Y Power Adapter

Thread the power cable through the bay, and attach it to the SyJet drive as shown in Figure 2-16.

Note: If you need to disconnect a DC power cable at some point, hold onto the cable connector and not the wires when pulling it free. Some connectors fit very tightly on DC power pins.

3. Check that all cables are attached securely.

Make sure that you did not loosen any cables to the SyJet drive or other devices, and make sure no screws are left in the computer.

Close Up Your Computer

1. Replace the computer's cover and reattach any screws that secure the cover.

Verify that the SyJet drive door opens and closes easily.

2. Reconnect the power cord to your computer.

Verify Your SyJet Drive Installation

1. Fully insert a SyJet cartridge into the SyJet drive.

Position the cartridge as shown in Figure 2-19, and open the drive door using your finger or the front end of the cartridge.

Note: The SyJet drive reads, writes, and formats only SyJet cartridges. The SyJet drive *cannot* read, write, or format other SyQuest cartridges.

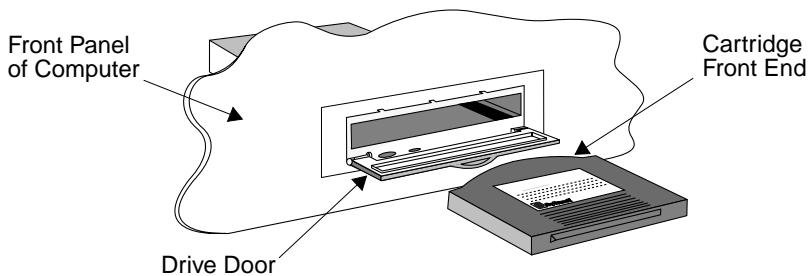


Figure 2-19. Positioning the Cartridge and Opening the Drive Door (installed view)

Slide the cartridge all the way into the drive. Press the tab firmly enough to ensure that the cartridge drops and seats in place. See Figure 2-20.

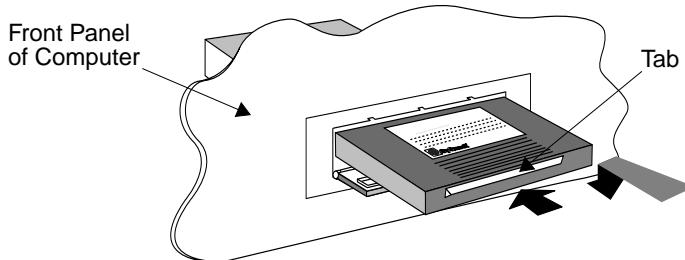


Figure 2-20. Inserting the Cartridge (installed view)

Note: If you remove or eject the cartridge, you must pull it out halfway or more in order to re-insert it. This feature prevents partial insertion.

2. Turn on your computer.

If the SyJet drive was properly installed, it will spin up the cartridge and the Drive Activity LED will flicker, turn yellow, and finally glow green. The glowing green LED indicates that the cartridge has been properly inserted and that the drive is ready.

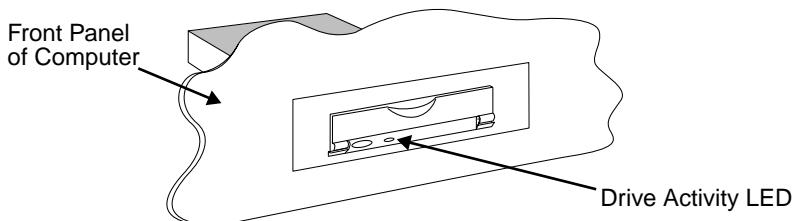


Figure 2-21. Observing the Drive Activity LED (installed view)

Caution: Your SyQuest PC-formatted cartridge contains essential installation software that will be lost if you reformat it. Prior to installing SyQuest EIDE software, do *not* format the SyJet cartridge using FDISK, FORMAT, Disk Administrator, or similar command function or program. However, if you do lose this installation software, you may download it from SyQuest's Web page at <http://www.syquest.com>, FTP site at <ftp://ftp.syquest.com>, or the Bulletin Board at (510) 656-0473.

- If your computer appears to start up normally, go to Chapter 3, "Installing the SyQuest EIDE Software."
- If your computer reports a BIOS error, go to the next section, "Troubleshooting."
- If your computer hangs (does not start your operating system), or reports a hard disk configuration error after a long delay, go to the next section, "Troubleshooting."

Troubleshooting

To troubleshoot your SyJet EIDE installation, first turn off your computer, disconnect the AC power cord from the back of your computer, and then remove its cover once again.

1. Verify all cabling.

Verify that the striped or colored edge of the EIDE cable attaches to pin 1 of the EIDE devices and the EIDE controller port. For most EIDE devices, the striped edge of the cable should be nearest to the DC power connector.

Make sure that all ribbon-cable connectors fully engage forty pins and that no pins are bent. Make sure that all power connectors to the EIDE devices are fully seated.

2. Verify all jumper settings for Master, Slave (and for many hard drives, Slave Present) EIDE devices.

If you have only one device on an EIDE cable, it must be set to Master. Refer to the documentation that came with your EIDE device for instructions on setting the device to Master.

If there are two devices on an EIDE cable, one must be set to Master and the other to Slave.

Finally, if you are attaching a slave device to a hard drive, verify the jumper pin settings on the hard drive. Many hard drives require different jumper settings when attaching a slave device, than when the hard drive is set to Master with no slave attached. Refer to documentation that came with the hard drive, look up the settings on the manufacturer's Web site, or contact the manufacturer's technical support group for additional guidance.

3. After verifying all cabling and jumper settings, put the cover back on your computer and reconnect its AC power cord.

4. Update Your Computer's CMOS Disk Settings

Your computer keeps records of EIDE devices in battery-powered CMOS (low power consuming memory). You may need to manually update these tables, especially when using Windows 95 or Windows NT, if your computer's CMOS Setup program does not automatically detect and update CMOS tables for EIDE device changes.

Computer manufacturers use several different methods for updating CMOS, including diskettes or a separate partition on your hard disk for storing CMOS Setup programs. The most common methods are given here. Refer to your computer's reference manual if you cannot use these methods. Refer to your EIDE controller manual if you are installing a SyJet EIDE drive on the secondary channel of an EIDE controller.

a. Turn on your computer and start the CMOS setup.

You may see a message stating that you must use specific keystrokes to enter Setup. The most common keystrokes follow:

Keystroke	BIOS Manufacturer
	AMI
<Ctrl><Alt><Esc>	Phoenix
<Ctrl><Alt><Ins>	Several Manufacturers
<Ctrl><Alt><S>	Award
<Esc>	Several Manufacturers
<F1>	Phoenix, AMI
<F2>	Phoenix
<Ctrl><Alt><Enter>	Phoenix

On some systems you will only have a few seconds to enter these keystrokes. Turn your computer off then on if you failed to enter the keystrokes in the allotted time period.

Upon entering the Setup program, go to step b. If you do not see a Setup message, your computer probably uses a hardware configuration program that is run from a diskette. Most IBM™ computers use this method. Refer to your computer's reference manual for setting disk drive CMOS.

Note: If you are unable to start the CMOS Setup program with any of the keystrokes listed in the previous table, press the space bar continuously while the system boots. This usually displays an error message that prompts you to run the Setup program.

b. Select the screen that allows you to change hard drives.

Most Setup programs have cautions about changing system settings. Continue through these screens until you find the screen that allows you to change hard drive settings. This screen is often called STANDARD SETUP or CMOS SETUP.

c. Locate the entry for the SyJet EIDE hard drive.

- To set the SyJet EIDE drive as the Slave drive on the primary EIDE cable (the way that most EIDE drives are installed), locate the second hard-drive entry in the CMOS table (often Drive D: or Drive 1:).
- To set the SyJet EIDE drive as the Master drive (boot drive) on the primary EIDE cable, locate the first drive entry in the CMOS table (often Drive C: or Drive 0:).
- To set the SyJet EIDE drive as the master drive on the secondary EIDE cable, select the third drive entry (often Drive 3 or Master on secondary).
- To set the SyJet EIDE drive as the slave drive on the secondary EIDE cable, select the fourth drive entry (often Drive 4 or Slave on secondary).

Note: When installing a SyJet EIDE drive as the boot drive, you must install the operating system on the SyJet cartridge. You need to have Operating System installation diskettes ready. Also, you need to verify that your computer permits booting from diskette drive A:. Many computers set these parameters as part of their Advanced BIOS options. Be sure to update your CMOS settings to enable booting from diskette drive A:.

d. Update the CMOS entry.

Today, most CMOS setup programs automatically detect and update CMOS table entries when a new drive is added. Earlier setup programs required that this be done manually. Still other programs give you the option of doing this automatically or manually.

SyJet EIDE drives have 2906 cylinders, 16 heads, and 63 sectors. If your CMOS setup program automatically detects the correct values for a newly installed drive, or has an automatic IDE drive detection option, use this feature. It should set these values for the CMOS parameters:

- **Logical Block Addressing (LBA) mode: Yes**
- **Multiple sector read/write: 2, 4, 6, 8 or 16** sectors at a time
- **Fast Programmed I/O mode: 0 through 4**
- **Cylinders: 2906**
- **Heads: 16**
- **Sectors per track: 63**

Note: SyQuest drives ignore Write Precomp and Landing Zone entries. You may enter any valid number for these parameters.

If your CMOS setup program *autodetects* different values, use the program's user definable mode or manual mode to enter the correct values. The following table shows the user-definable numbers for several BIOS manufacturers:

BIOS	Version	User-Definable Type
AMI	1991 or later	47
Award	1991 or later	48 or 49
Mr. BIOS	1991 or later	46 or 47
Phoenix	All	48, 49, or USER CONFIG

e. Note these requirements and limitations if you are using an IDE controller.

For Windows 95, Windows 3.1x, and DOS-only users—if you are *not* using the SyJet EIDE drive as your boot device, and if your CMOS setup program will not allow you to set the values given in step d, you can retain the full capacity of the drive cartridge by using these values for the CMOS cylinder/head/sector parameters:

- **Cylinders: 1024**
- **Heads: 16**
- **Sectors per track: 63**

SyQuest software will overwrite the reported CMOS settings.

For Windows NT and OS/2 users, or for those using the SyJet EIDE drive as a boot device, you will be unable to access more than 520 MB of the drive cartridge's capacity unless you do one of the following:

- Upgrade your system with an EIDE controller.
- Use third-party disk managing software.

Refer to SyQuest's Web page at <http://www.syquest.com> for more details.

f. Save the settings and exit the CMOS setup program.

Follow the instructions on the screen for saving the values and exiting the setup program.

5. After setting the CMOS parameters, reboot your computer.

Windows 95 and Windows NT 4.0 users should see a new removable disk icon for the SyJet drive added to the My Computer group. If you do not see a new removable disk icon, run the wizard Add New Hardware as follows:

- a. Click Start.**
- b. Move your mouse cursor to Settings and click Control Panel.**
- c. Double-click on Add New Hardware and click Next.**
- d. Click the Yes, Recommended radio button and click Next.**

The wizard Add New Hardware will search for the SyJet drive and add it to the Windows 95 or Windows NT registry. Upon restarting your computer, you should now see a removable hard disk icon for the SyJet drive added to the My Computer group.

6. If you still have problems, please follow these steps:

- a. Visit our Web site at <http://www.syquest.com> for more technical documentation and frequently asked questions.**
- b. If you still need assistance, contact SyQuest Technical Support at (510) 226-5400.**

3

Installing the SyQuest EIDE Software

This chapter gives instructions for installing your SyQuest EIDE software. The SyQuest EIDE software includes device drivers and utilities for the drive and cartridge.

You need both the SyJet cartridge and the SyQuest Installation Diskette to complete this simple procedure. The installation diskette reads essential information from the SyJet cartridge during software installation.

Make sure the SyJet cartridge is *fully inserted* in the drive, as instructed on page 2-27. *Fully inserted* means that you have pushed the cartridge all the way into the drive and down.

Note: If you have reformatted your SyJet cartridge or lost the installation diskette, you may download the latest software from SyQuest's Web site, FTP site, or Bulletin Board. Find the addresses and phone numbers you need at the front of this guide.

Now find the section for your operating system and follow those steps. When you have completed the installation, see Appendix A, "Using the SyQuest Utilities" for more information.

Note: When you install *any* EIDE device (including your SyQuest drive) one or more of your existing drive letters may be reassigned. This can cause problems with local paths and with network drive assignments. You can control these assignments by changing the order in which your computer assigns letters to your drive partitions. See Appendix B, "Managing Drive Letters Under Windows 95," for more information.

Windows 95

- 1. Click Start, then select Settings and choose Control Panel.**
- 2. In the Control Panel window, double-click the Add/Remove Programs icon.**
- 3. Insert the SyQuest installation diskette into your diskette drive.**
Also verify that the SyJet cartridge is properly inserted in the SyJet drive.
- 4. Click Install, click Next, and then click Finish.**
- 5. Follow the instructions in the Installation Wizard window to complete the software installation.**

DOS Products and Windows 3.1x

1. Begin at the DOS prompt.

Press Alt + F4 if you are in Windows 3.1x—do not use a DOS shell.

2. Insert the SyQuest installation diskette into your diskette drive.

Also verify that the SyJet cartridge is properly inserted in the SyJet drive.

3. At a DOS prompt, type A:\INSTALL and press Enter.

If your 3.5-inch diskette drive is device B, type B:\INSTALL and press Enter.

4. Follow the installation program prompts.

Windows NT

Windows NT users do not need to install any SyQuest software for the SyJet EIDE drive. Your operating system already has the drivers required to support the installation, and SyQuest does not provide special drive and cartridge utilities for this operating system.

You can use Disk Administrator to prepare a SyJet cartridge or add a signature block. Since you do not need the installation software on the SyJet cartridge, you may reformat the cartridge if you wish.

Note: Windows NT 4.0 with Service Pack2 or higher fully supports cartridge removability for SyJet drives. If you use version 3.5x or an earlier version of Windows NT, you must first close all programs and shutdown Windows NT before you can remove a cartridge.

OS/2

1. Insert the SyQuest installation diskette.

Also verify that the SyJet cartridge is *fully* inserted in the SyJet drive.

2. Select Device Driver Install from System Setup.

If you are using OS/2 4.0, select Install/Remove from System Setup.

3. Change the source.

If you are using OS/2 4.0, change the source from A:\ to A:\OS2-40.

If you are using OS/2 2.1x or 3.x, change the source from A:\ to A:\OS2.

4. Click SyQuest EIDE Device, and then click OK.

Note: SyQuest does not provide special drive and cartridge utilities for this operating system.

4

Ejecting a Cartridge

This chapter gives instructions for ejecting a SyJet cartridge, both with and without power to the drive.

With Power to the Drive

Follow these steps to remove the cartridge, when changing cartridges, or when transporting your SyJet drive:

- 1. Verify that the Power LED glows green.**
The SyJet drive should always be switched on when you eject a cartridge.
- 2. Exit all applications that use the cartridge and close all open files on the cartridge.**
You may lose data if you eject the cartridge before closing all open files on the cartridge.
Windows NT 3.x users: Since Windows NT 3.x treats the SyJet drive as a *fixed* and not a *removable* drive, you cannot remove a cartridge from the drive until you shut down Windows NT.
- 3. Software unlock the cartridge if you use Windows 3.1x, OS/2, or DOS only.**

See “SyJet Cartridge Features” on page A-2 for information about the Lock or Unlock utility.

4. Press the Eject button on the front of the SyJet drive.

See Figure 4-1. The Drive Activity LED flickers amber, the drive eject tone sounds, the drive door opens, and the cartridge ejects. Three tones sound to indicate that the cartridge has been fully ejected and is ready for removal.

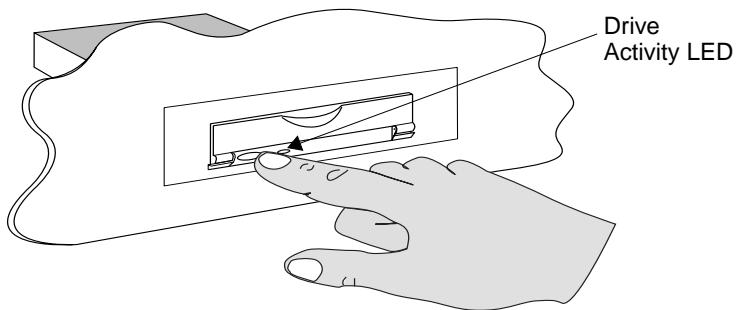


Figure 4-1. Pressing the Eject Button (installed view)

5. Remove the cartridge and place it in its protective case.

Caution: If you remove or eject the cartridge, you must pull it out halfway or more before you can re-insert it. This built-in feature prevents partial insertion. Never store or move the SyJet drive with the cartridge partially inserted. Leaving a cartridge partially inserted or moving the SyJet drive with the cartridge inserted may damage the drive and void your warranty.

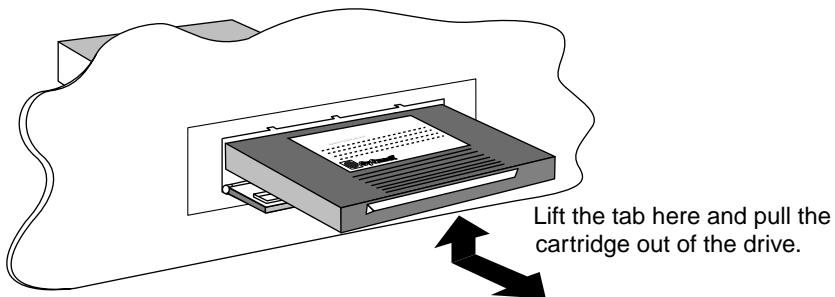
Without Power to the Drive

While the drive is powered off, you can manually eject a cartridge.

Caution: Never manually eject a cartridge while the power is on. This can damage the drive and invalidate the warranty.

- 1. Wait for 45 seconds after power is turned off.**
- 2. Open the drive door and remove the cartridge.**

Remove the cartridge by gently lifting the tab and pulling the cartridge out of the drive. See Figure 4-2.



**Figure 4-2. Pulling a cartridge out without power
(installed view)**

- 3. Return the cartridge to its protective case for storage or transport.**

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