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Entry Number:  
Title: **SCSI Setup**  
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Product Vendor:  
Vendor Contact Information:

Hardware Platform: **Intel Processor Family**  
Reported in Software Version: **NEXTSTEP Release 3.1**  
Keywords: **SCSI, setup**

### **Usage Commentary:**

The SCSI interface provides a high speed bus for up to seven peripherals.

### **Setup and Installation:**

Each device on the SCSI bus must be assigned a unique SCSI ID number. SCSI interface cards commonly occupy SCSI ID number seven, so treat this as reserved unless your card's documentation says otherwise.

SCSI ID numbers are generally set on the rear a device if external and with jumpers (usually a block of three labeled A0, A1, A2) if the device is mounted internally. Refer to the documentation provided with your SCSI devices to determine the correct method for setting SCSI ID numbers. SCSI implementations in the PC world seem to be sensitive to gaps in the SCSI bus. Thus, devices on the bus should be numbered sequentially starting at zero (usually the boot device).

The SCSI bus should be terminated at both ends, but nowhere else. An incorrectly terminated SCSI bus may work, but it may also corrupt hard disks. The SCSI bus is like an antenna and must

operate at a correct electrical impedance to pass signals at maximum strength. An extra set of terminators on the bus will attenuate the signals on the bus and corrupt transmission.

Most of the 486 systems we have deployed have terminations installed on the hard drive itself and on the SCSI card. When you add a cable from the back of your PC to an external SCSI device like a CD-ROM drive, you are extending the SCSI bus, so that the terminations on the card which used to be at the end of the bus (correct) are now at the middle of the bus (wrong). Remove them before powering-up, and replace them when you detach the CD-ROM drive. A slightly easier alternative is to not use the on-card termination at all, but when there is no cable attached to the back of the PC, leave a SCSI terminator attached to the SCSI card's backpanel connector, and remove that terminator when running with an external SCSI device (like a CD-ROM drive).

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