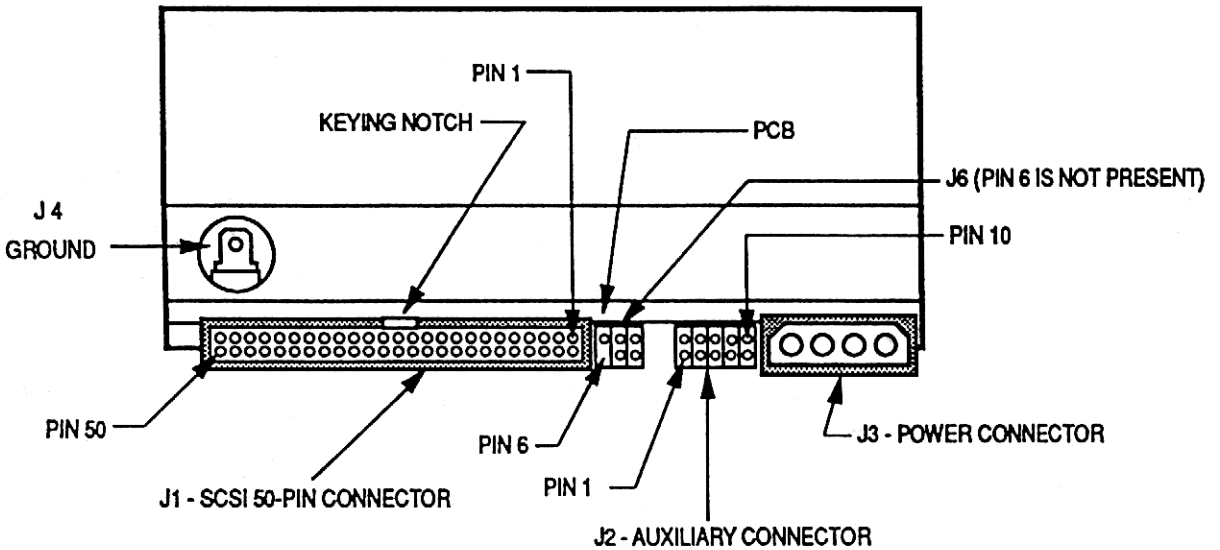


**Figure 3-5**  
Connector Locations, Rear View of Drive (XT-8000S)

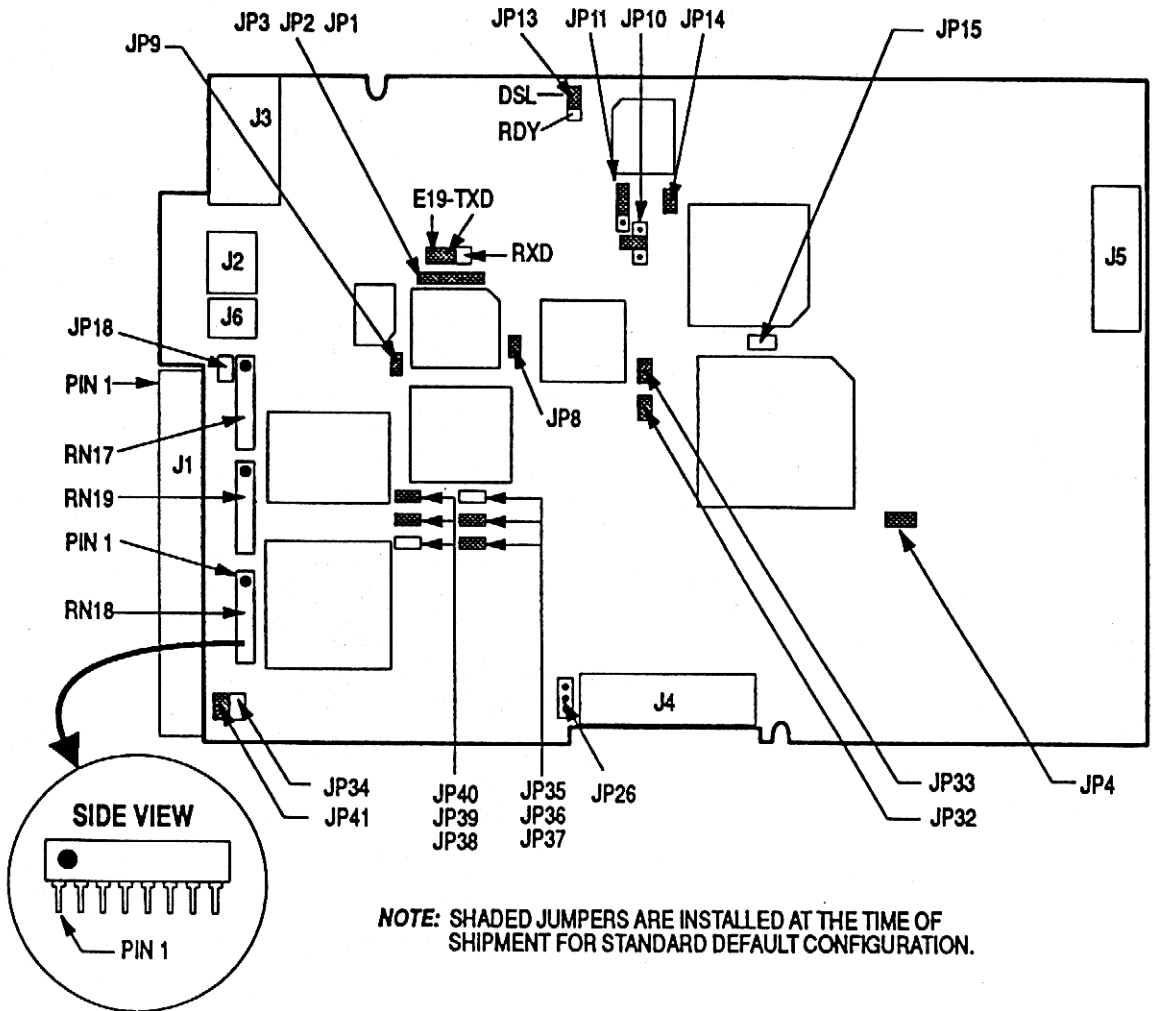


**Figure 3-6**  
Connector Locations, Rear View of Drive (XT-8000SH)

Connection to J1 is via a nonshielded fifty-conductor connector, consisting of two rows of twenty-five female contacts on 0.1 inch centers. Figure 3-7, SCSI Cable Connector, shows the configurations and dimensions of suitable mating connectors.

## 4.0 XT-8000S USER SELECTABLE OPTIONS

XT-8000S jumper locations are identified in Figures 4-1 and 4-2, PCB Layout (single ended version and differential version).



**Figure 4-1**  
PCB Layout, Single Ended (XT-8000S)

SCSI ID	PRIORITY	JP37 ID2	JP36 ID1	JP35 ID0
0	Lowest ↑ ↓ Highest	Out	Out	Out
1		Out	Out	In
2		Out	In	Out
3		Out	In	In
4		In	Out	Out
5		In	Out	In
6		In	In	Out
7		In	In	In

In = Installed, Shorted  
 Out = Not Installed, Open

**Table 4-1**  
**SCSI ID Jumpers (XT-8000S)**

The disk drive is shipped from the factory with a SCSI ID of six. This assures that sufficient jumpers are available for any address except seven, which is usually reserved for the host system.

The SCSI ID can also be set remotely through the auxiliary connector (see section 4.9, Auxiliary Connector, later in this chapter). The SCSI ID jumpers must be removed to use the auxiliary connector option, and any shorting required for a selected SCSI ID is done outside the disk drive.

## 4.2 DRIVE POWER-UP OPTIONS

In order to allow for system power supply constraints, which may require minimizing surge current when powering up multiple disk drives, three modes of start-up sequencing are provided (see Table 4-2, Summary of Power-Up Options).

SUMMARY		
JP14 (spin with power)	JP38 (spin delay)	MODE
Out Out In	Out In In or Out	Start by ID Sequence Wait for START Command Start When Power is Applied

**Table 4-2**  
**Summary of Power-Up Options**

The devices driving the disk drive inputs should be open collector devices capable of sinking at least 48 milliamps at a voltage level of less than 0.5 volts DC (7438 or equivalent).

Devices receiving the disk drive outputs should be of SCHMITT trigger type to improve noise immunity (74LS14, 74LS240, or equivalent). The initiator should not load the bus with more than one standard low power Schotky transistor-transistor logic (LSTTL) input load per line, and should terminate all signals with 220/330 ohm terminators.

***NOTE:** The differential version does not provide for termination on the PCB. External terminators are available from Maxtor.*

## **4.9 AUXILIARY CONNECTOR**

Connector J2 in Figure 3-5, Connector Locations, Rear View of Drive, is an auxiliary connector providing remote control of the write protect feature and the SCSI ID, and the ability to carry the LED signal beyond the disk drive. The auxiliary connector is a Berg 68451-121, ten-pin part. The mating connector is a 3M 3473-6010 part.

Pin assignments are as in Table 4-3, Auxiliary Connector Pin Assignments (also see Figure 3-5, Connector Locations, Rear View of Drive).

PIN 9 Gnd	PIN 7 -WRT PROTECT	PIN 5 -LED	PIN 3 (key)	PIN 1 +LED
PIN 10 ID0	PIN 8 ID1	PIN 6 ID2	PIN 4 Gnd	PIN 2 (open)

**Table 4-3  
Auxiliary Connector Pin Assignments**

When pin seven is connected to ground, the disk drive is protected from writing, regardless of commands sent to the disk drive via the SCSI interface. The write protect terminal may also be connected to the cathode (negative lead) of an LED. This LED should have its anode (positive lead) connected to a positive voltage source. When the disk drive enters the write protect mode, the write protect signal becomes true (low) and the LED lights.

For remote write protect, JP18 must be removed (see section 4.4, Write Protect Option, earlier in this chapter).

When an LED is connected to pin one (+) and pin five (-), that LED functions in the same manner as the LED which is mounted on the disk drive's faceplate. This is typically used in cases where the disk drive is mounted in a position where the disk drive's LED is not visible and the faceplate is removed.

Pin three is not present so that users can key the mating connector. Pin three of the mating connector should be blocked for this purpose.

The SCSI ID of the disk drive may be programmed remotely by selectively connecting pins six, eight, and ten to ground, or leaving them open. The various combinations are shown in Table 4-4, Remote SCSI ID Programming Combinations.

SCSI ID	ID2	ID1	ID0
0	Open	Open	Open
1	Open	Open	Ground
2	Open	Ground	Open
3	Open	Ground	Ground
4	Ground	Open	Open
5	Ground	Open	Ground
6	Ground	Ground	Open
7	Ground	Ground	Ground

**Table 4-4**  
**Remote SCSI ID Programming Combinations**

SCSI ID jumpers (JP35 through JP37) must be removed for the remote SCSI ID option.

#### **4.10 SPINDLE SYNCHRONIZATION CONTROL**

Spindle synchronization is a feature that allows up to forty-eight disk drives to synchronize the rotational position of their spindles. Pin assignments for connector J6 are shown in Table 4-5, J6 Pin Assignments.

## XT-8000S/SH Product Specification & OEM Technical Manual

<b>PIN 5</b> Gnd	<b>PIN 3</b> Gnd	<b>PIN 1</b> Master
<b>PIN 6</b> (key)	<b>PIN 4</b> Slave	<b>PIN 2</b> Slave

**Table 4-5**  
**J6 Pin Assignments**