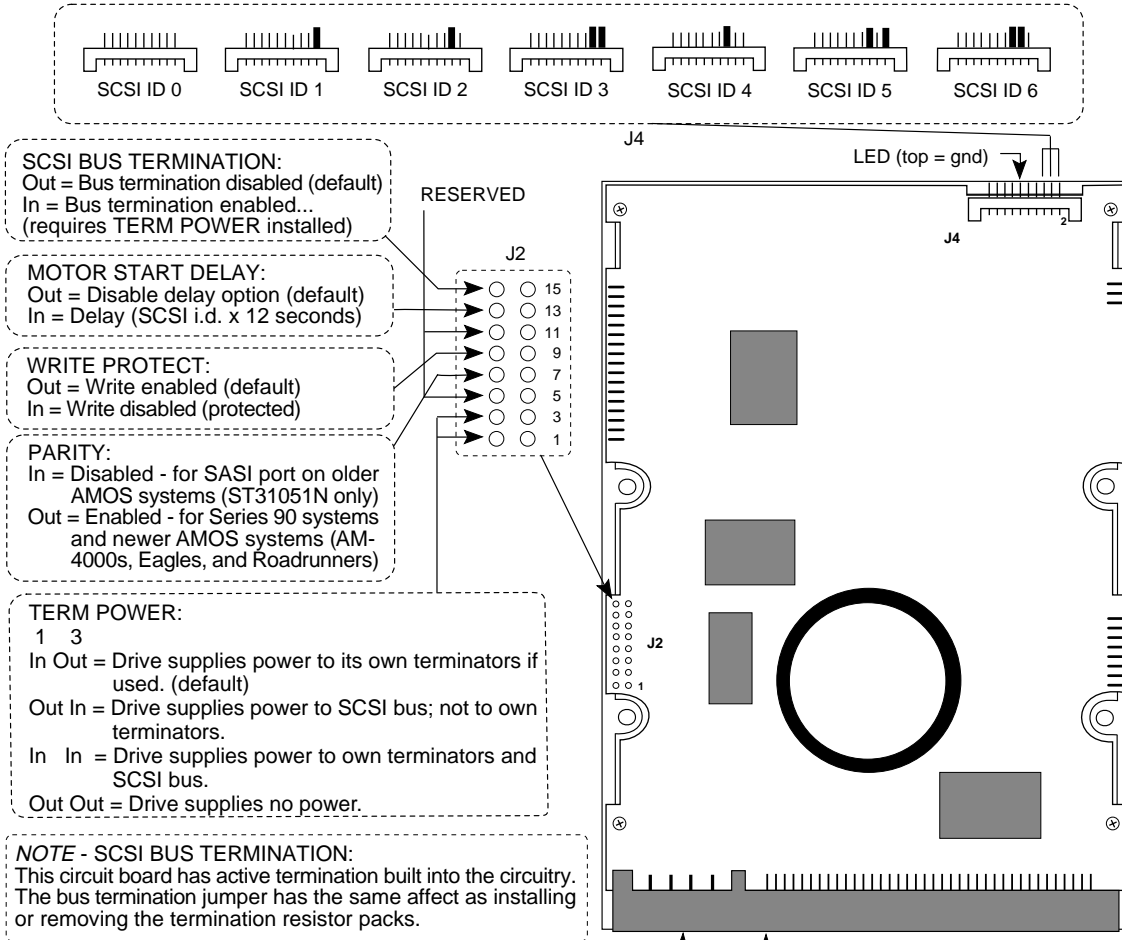# SEAGATE HAWK ST31051N/ST31055N 3-1/2" SCSI-2 DISK

MODEL #	FORMATTED CAPACITY	NUMBER OF LOGICALS	BITMAP SIZE	FORMAT INTERLEAVE	ALPHA MICRO PART NUMBER
ST31051N ST31055N	1.01GB	32	4042	1	PDB-00436-41
ST31051N	1.01GB	32	4042	1	PDB-00436-69

SCSI ID 0   SCSI ID 1   SCSI ID 2   SCSI ID 3   SCSI ID 4   SCSI ID 5   SCSI ID 6

J4

LED (top = gnd)

J4

RESERVED

J2

SCSI BUS TERMINATION:
Out = Bus termination disabled (default)
In = Bus termination enabled...
(requires TERM POWER installed)

MOTOR START DELAY:
Out = Disable delay option (default)
In = Delay (SCSI i.d. x 12 seconds)

15
13
11
9
7
5
3
1

WRITE PROTECT:
Out = Write enabled (default)
In = Write disabled (protected)

PARITY:
In = Disabled - for SASI port on older AMOS systems (ST31051N only)
Out = Enabled - for Series 90 systems and newer AMOS systems (AM-4000s, Eagles, and Roadrunners)

J2

TERM POWER:
  1   3
In Out = Drive supplies power to its own terminators if used. (default)
Out In = Drive supplies power to SCSI bus; not to own terminators.
In   In = Drive supplies power to own terminators and SCSI bus.
Out Out = Drive supplies no power.

NOTE - SCSI BUS TERMINATION:
This circuit board has active termination built into the circuitry. The bus termination jumper has the same affect as installing or removing the termination resistor packs.

DC POWER   PIN-1

IMPORTANT TERMINATION INFORMATION:

For AMOS based computers, this drive performs best when used in conjunction with an external terminator (PRA-00222-00). Using this drive in an AMOS based computer with its own termination (pins 15-16 of jumper J2) enabled is NOT recommended. Note however, that the TERM POWER jumper (pins 1-2 of J2) may be left installed.

In Series 90 configurations, you can use either the on-board termination or an external terminator. To use on-board termination, install both the TERM POWER (pins 1-2 of jumper J2) and SCSI BUS TERMINATION (pins 15-16 of J2) jumpers.

To use the SCSI-2 disk drive shown above, you must use the following *minimum* file versions: (as of: 9/96)

For AMOS 1.4C and AMOS 2.2C

FMTSCZ.LIT   3.1 (152)-8
FMTSCZ.OVR   1.0 (119)
FIXLOG.LIT   1.1 (111)
SCZRR.DVR   hash= 573-415-504-133
SCZ190.DVR   hash= 710-053-650-231

ADDITIONAL FOR AMOS 1.4C

SYSACT.LIT   1.0 (123)
SYSLIB.LIB   hash= 457-611-452-123

ADDITIONAL FOR AMOS 2.2C

BITMAP.LIT   2.1 (118)

ST31055N
MC1285

(see reverse side for more information)

1.0°°BOOT PROM COMPATIBILITY INFORMATION

THE DISK DRIVE SHIPPED WITH THIS NOTICE HAS THE FOLLOWING MINIMUM BOOT PROM REQUIREMENTS FOR AMOS BASED COMPUTERS

SYSTEM TYPE	STANDARD BOOT PROM REQUIREMENTS (available kits)	AM-172 ROADRUNNER ENHANCED BOOT PROM REQUIREMENTS (available kits)	AM-174 ROADRUNNER ENHANCED BOOT PROM REQUIREMENTS (available kits)
EAGLE 100	**K00** (PDB-00172-90)	N/A	**M00** (PDB-00174-90) w/ AM-987
EAGLE 200-500	N/A	**K00** (PDB-00172-90)	**M00** (PDB-00174-90)
EAGLE 550	N/A	N/A	**M00** (PDB-00174-90)
AM-4000	**D00** (DWB-00191-10, Rev. A04) ①	N/A	N/A
AM-3000 VME 20MHz	**C00** (PDB-00185-50)	N/A	**I00** (PDB-00174-90) w/ AM-987
AM-3000 VME 50MHz	**C00** (PDB-00185-51)	N/A	**I00** (PDB-00174-90) w/ AM-987
AM-3000M	**E00** (PDB-00140-50)	N/A	**I00** (PDB-00174-90) w/ AM-987
AM-2000M	**E00** (PDB-00145-50)	**D00** (PDB-00172-90) w/ AM-986	**A00** (PDB-00174-90) w/ AM-986
AM-2000 VME	**F00** (PDB-00187-00)	**E00** (PDB-00172-90) w/ AM-986	**B00** (PDB-00174-90) w/ AM-986
AM-1600	**D00** (PDB-00135-50, Rev. A00) ②	**D00** (PDB-00172-90) w/ AM-986	**A00** (PDB-00174-90) w/ AM-986
AM-1200	**E00** (PDB-00178-01)	**D00** (PDB-00172-90) w/ AM-985	**A00** (PDB-00174-90) w/ AM-985
AM-1000	**E00** (PDB-00169-51)	**D00** (PDB-00172-90) w/ AM-985	**A00** (PDB-00174-90) w/ AM-985

SYSTEM TYPE	STANDARD BOOT PROM REQUIREMENTS (available kits)	AM-540 ENHANCED BOOT PROM REQUIREMENTS (available kits)
AM-3000M	**E00** (PDB-00140-50)	**E00** (PDB-00140-50)

ST31051N proms
MC1289

NOTE: PDB-00436-41 (ST31051N or ST31055N) can *only* be used on Series-90 systems or on the SCSI-2 port of an AMOS system!

To use ST31051N on the SASI port of an older AMOS computer, order PDB-00436-69. The PROM revision levels shown for non-SCSI-2 computers apply to this part number only. ST31055N cannot be used on the SASI port.

① = AM-4000 boot PROMs are located on a small PCB (**p**rinted **c**ircuit **b**oard) (DWB-00191-10) that plugs into the AM-190 board. In the table above, the revision of the boot PROMs is D00 and the revision of the printed circuit board assembly that contains the boot PROMs is A04. If you have an A03 or earlier boot PROM PCB assembly, you simply unplug it and replace it with an A04 or later assembly.

② = AM-1600 boot PROMs are shipped in an upgrade kit, the part number of which is shown. The revision of the upgrade kit may not match the revision of the PROMs it contains. If the revision shown on the actual boot PROMs is not at least D00, order the upgrade kit part number shown.

N/A = NOT APPLICABLE OR NOT SUPPORTED

The boot PROM kit revision appearing in **bold** in each of the columns is the minimum acceptable revision level applicable to the disk drive shipped with this notice. If you order a boot PROM kit, you may receive a **later revison boot PROM**, which is perfectly acceptable.

1) The **SCSI Bus Termination** jumper enables/disables only the on-board active *termination*. It has the same affect as installing or removing the terminating *resistor packs*, as on most previous disk drives. That is, if the SCSI bus is terminated at the end of the line by an external SCSI termination plug, or by another SCSI device with bus termination enabled, you must remove the SCSI Bus Termination jumper to avoid a "double termination" conflict. Conversely, if the SCSI bus is not otherwise terminated, this jumper must be installed (as well as the Term Power jumper) to provide the proper bus termination.

2) The **Term Power** jumper, when installed, allows the drive to supply power to its own on-board terminators, if the SCSI Bus Termination jumper option is used. The Term Power jumper may be left installed at all times, since it has no affect unless the Bus Termination jumper is installed also. Refer to your hardware documentation for more detailed information, or call the Alpha Micro Technical Assistance Center for help.