

Avolites Ltd.
Engineering Change Notice

Title	Pearl Disc Drive
ECN Number:	ECN- 0109
Equipment:	Pearl
Date:	19/05/99
Author:	Adam Proffitt
Revision:	1.0

Reason for ECN:	In case of disk drive failure
Special Parts Required:	High Density 3.5in floppy disk drive
Special Tools Required:	None

Work Required:

If the desk refuses to access the floppy disk:
First try a brand new formatted disk!

If the desk refuses to read high density disks then the disk drive may be for 720K disks only. (possible on some early pre- Pearl 2000 desks).

It is possible to replace the drive with a standard PC (high density) floppy drive with a minor modification.

This is because a PC drive is normally selected internally to respond to signals for Drive no. 1

A drive in the desk should be selected to be Drive no. 0.

Sometimes there is a link inside the drive for Drive no. selection (normally marked DS0 / DS1).

Otherwise linking Pins 10 & 12 on the IDC (34 way) connector inside the drive will have the same effect. Note the pin layout of the 34 way connector - shown below.

Alternatively you can link pins 30 & 32 of Floppy Disk Controller IC on the Borris Mother Board which will have the same effect as too.

Pin number 1 or 2 is usually marked on the circuit board of the disk drive. The disk drive cable has a coloured stripe going to pin 1. If the cable is accidentally plugged upside - down then the disk drive led is usually permanently on but no harm is done.

The following applies to Borris (not Borris2 which started at PRL785)mother boards only:

We have found that some of the disc controller IC's are susceptible to noise on their reset pin 31 which can result in unreliable operation. Connect a 470pF capacitor between PIN 31 (RESET) and PIN 19 (GND.) to improve operation.

34 WAY IDC

