COMPUTER SELF TEST

The Computer performs a self test every time it is turned On. If no problems are detected, the name of each section tested will be displayed on the Monitor screen along with the word PASS. The Computer will then beep once and start booting from the Floppy Disk Drive or the Hard Disk Drive. If a problem is detected, an error message will be displayed on the Monitor Screen and also sent to a printer connected to the Parallel Port. Use the following chart to determine the area of the problem and any possible IC's that may be bad:

ERROR MESSAGE	PROBLEM
CPU Fail	Bad CPU (IC 4D)
ROM Module Fail	Bad ROM (IC's 6J and 6K)
DMA Timer Fail	Bad Channel 1 Timer (IC 7Q)
DMA Control Fail	Bad DMA Controller (IC 7BB on Daughter Board)
Interrupts Fail	Software Interrupt failure
Interrupt Fail H0	Timer Channel 0 INT REQ0 not functioning (IC 1Q)
Interrupt Fail H1	Keyboard Controller INT REQ1 not functioning (IC's 1Q and 8W)
Interrupt Fail H2	I/O Board INT REQ2 not functioning (IC 1Q)
Interrupt Fail H3	I/O Board INT REQ3 not functioning (IC 1Q)
Interrupt Fail H4	Serial Interface INT REQ4 not functioning (IC's 1Q and 3Q)
Interrupt Fail H5	I/O Board INT REQ5 not functioning (IC 1Q)
Interrupt Fail H6	Floppy Disk Controller INT REQ6 not functioning (IC's 1Q and 8T)
Interrupt Fail H7	Parallel port INT REQ7 not functioning (IC's 1Q, 5Y and 7Y)
RT Clock Fail	Real Time Clock registers not functioning (IC 10W)
RT Clock Fail:NR	No response from 8254 Interrupt (IC 7Q)
RT Clock Fail:LO	Low end 8254 Interrupt is out of specifications (IC 7Q)
RT Clock Fail:HI	High end 8254 Interrupt is out of specifications (IC 7Q)

If a defect is found while testing the RAM, an error message in the following format should appear:

aaa kb RAM Fail:bb:yccc:dddd:eeee:ffff

aaa	Last bank tested in decimal
bb	Configuration of RAM 01 = 128 KB total RAM 02 = 256 KB total RAM 03 = 512 KB total RAM 05 = 640 KB total RAM
y	Bank (128 KB) with defective RAM 1 = Bank 1 on System Board 2 = Bank 2 on System Board 3 thru 4 are reserved
ccc	Segment of defective RAM
dddd	Offset of defective RAM
eeee	Data written to the RAM
ffff	Data read from the RAM