**EPSON AMERICA, INC.** 

## INFORMATION

## **Product Support Bulletin**

Subject: Equity le - Lotus 1 - 2- 3 Graph Patch Program

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When using Lotus 1 - 2- 3 (ver. 2.01) with the Hercules Monochrome board or an Epson MGA board set for monochrome mode, the system displays garbage (usually a checker board pattern) when using graphics. This also occurs if the 90 x 25 text mode is selected in the Lotus INSTALL program, since Hercules graphics mode is utilized.

The solution for this problem is to disable the internal MCGA video by creating and using the program listed below. Run the MS - DOS supplied DEBUG program and type in the following:

; Comments only - do not type in

- A

xxxx:0100 in AL,65; Get current value of equipment enable register.

xxxx:0102 and AL,FB; Clear video enable bit to disable MCGA.

xxxx:0104 out 65,AL; Output new value to the equipment enable register.

xxx"0106 int 20 End of program.

xxxx:0108 Press <Enter> key here.

-NMCGADIS.COM; Specify name of program as "MCGADIS.COM".

-RCX , Edit CX register.

CX 0000 ; Currently contains 0000. :8 ; Specify 8 bytes to be saved. - W ; Save program to disk.

Writing 0008 bytes

- Q ; Quit DEBUG.

Note: xxxx segment value will vary depending on system memory usage.

The MCGADIS.COM program can now be found in the current directory. It can be added to the AUTOEXEC.BAT file or run directly, before running Lotus. This program will enable a Hercules Monochrome board or Epson MGA board to be used in monochrome mode, but will not allow a CGA card to be used.