

INTERNAL RAM TEST

For those A/// owners with a 12 volt, 128K machine who are having problems with their A///'s memory, it has an internal diagnostic to test the RAM. To check if you have a 12V machine, not a 5V, check your serial number. If it is greater than 100,000, it is probably 5V. To run the test, one must remove all the peripheral cards, esp. Grappler and Profile, and go into Monitor by holding down CONTROL and OPEN APPLE, then hit RESET. An arrow and a flashing underline should appear in the upper left hand corner of the screen. Type F6E6G and the screen will fill with "garbage" for a moment and about every 20 seconds the following will appear on the screen.

DIAGONISTIC RAM

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. . . . .
. . . . .
. . . . .
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Run for about 20 minutes, longer if it normally takes that long for the error to show up. If the dots keep appearing, then everything is normal, but if an inverse 1 shows up, you probably have a bad RAM chip at that location. The code to where on the memory board the bad chip is as follows:

```
D I A G O N I S T I C      R A M
B9 B8 B7 B6 B5 B4 B3 B2
B17 B16 B15 B14 B13 B12 B11 B10
B9 B8 B7 B6 B5 B4 B3 B2
B17 B16 B15 B14 B13 B12 B11 B10
C17 C16 C15 C14 C13 C12 C11 C10
D9 D8 D7 D6 D5 D4 D3 D2
D17 D16 D15 D14 D13 D12 D11 D10
C9 C8 C7 C6 C5 C4 C3 C2
```

If replacing the chip does not solve the problem, then it could be the memory board itself. Other error messages could show up, if so give me a call and will look it up in my Apple /// Service Reference Manual. With regards to this manual, if you wish to copy it, see me and we can make arrangements. However, it is about 200 pages long and it would be loaned with the understanding that you would do the same for someone else.

If you have a 256K ///, which has different memory locations, you can go into monitor and run the same test; however, you must use another procedure to determine the problem chip, if an inverse 1 shows up. If you have this problem, let me know and I can get you the procedure.

-Rod Whitten