S E R V I C E   N O T E

SUPERSEDES: NONE

8593E Spectrum Analyzer

Serial Numbers:
3346A00903 to 3412A01138
3402U00501 to 3414U00571

Defective EEPROM's can cause blank or partially blank display

To Be Performed By: Agilent Personnel or Customer Qualified Personnel

Duplicate Service Notes:
8590D-05
8590L-01
8591C-02
8591E-05
8592D-03
8592L-01
8593E-06
8594E-06
8595E-06
8596E-06

Parts Required: Firmware Replacement Kit

Situation:
A bad batch of programmed EEprom's were shipped before the problem was discovered. Main symptom is a blank screen or partially blank screen. The problem is usually triggered when the analyzer is switched OFF and then quickly switched back ON.

Continued

DATE: April 1997

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

INFORMATION ONLY

AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
PGS	5320	

Agilent Technologies

Solution/Action:
When analyzers power-up with a blank screen or some form of blank screen, the tendency, in some cases, has been to replace the processor or perform a processor RESET (shorting the battery). There are commands that can be entered through the I/O that might have cleared the analyzer. In some cases, the firmware could have been replaced with the 94.08.22 datecode (Kit p/n 08590-60372) to clear the blank display and prevent a possible reoccurrence. The new firmware inhibits certain hardware calls that caused some resets in the analyzer. The full nature of the blank screen condition is not known since the division has not had the opportunity to evaluate the processor boards which exhibit the problem.

To clear the analyzer, it is not necessary to reset the processor by shorting the battery voltage. There are two methods of remotely clearing the analyzer. Both require an I/O, which can be installed temporarily for this purpose if not part of the analyzer. A reset should rarely be necessary and some say never should be required.

Recommended Action

1. Power off, connect a keyboard to the analyzer and power on. Press F8 to activate the command mode. Enter "Dispose" or "Erase" and press enter. If not clear, go to step 2. for GPIB or step 3. if the I/O is an RS-232.

2. If the I/O is GPIB, connect a controller I/O and execute the following command, "SEND 7;UNL MTA LISTEN 18 CMD 12". The analyzer must, of course, be set to address 18.

3. If the I/O is RS-232, connect a PC to I/O, execute the break command and press the following analyzer keys:

    CONFIG More 1 of 3
    Dispose User Mem, Dispose User Mem
    (Firmware datecode 93.05.06 or later)
    Dispose User Mem, Erase Mem All)

If all of these methods fail, please replace the processor and return it to me at the division (MID) for evaluation.

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