

8590D-05

S E R V I C E N O T E

SUPERSEDES: None

HP 8590D Spectrum Analyzer

Serial Numbers: 3340A00551 to 3411A00668
3402U00181 to 3408U00203

Defective EEPROM's can cause blank or partially blank display.

Duplicate Service Notes:

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

To be performed by: HP Personnel or Customer Qualified Personnel

Parts Required: Firmware Replacement Kit

Situation:

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

Continued

DATE: December 1994

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
INFORMATION ONLY		
AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
PGS	5320	

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Solution/Action

When analyzers power-up with blank a display or some form of blank display, 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 date-code (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 display 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 HP-IB or step 3. if the I/O is an RS-232.
2. If the I/O is HP-IB, 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 an RS-232, connect a PC to I/O, execute the break command and press the following analyzer keys:

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