

8590D-06

S E R V I C E N O T E

SUPERSEDES: None

HP 8590D Spectrum Analyzer

Serial Numbers: 0000A00000 to 9999A99999
0000U00000 to 9999U99999

A16 Processor/Video Assembly

ID Codes needed to properly identify the proper HP 859X Spectrum Analyzer when replacing the A16 Processor/Video Assembly or when memory is inadvertently erased.

Duplicate Service Notes:

8590L-02
8591C-03
8591E-06
8592D-04
8592L-02
8593E-07
8594E-07
8595E-07
8596E-07

To be performed by: HP Personnel or Customer Qualified Personnel

Parts Required: None

Continued

DATE: December 1994

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
INFORMATION ONLY		
AUTHOR:	ENTITY:	ADDITIONAL INFORMATION:
PGS	5300	

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Situation:

When replacing the A16 Processor/Video Assembly, the firmware checks the Analog Interface to determine what the correct spectrum analyzer model is and store that information. Under certain conditions, the correct model is misread and the wrong information is stored. In this case, the start-stop frequency and the span can be in error. In some cases, cycling the power two or three times will help the processor recognition process. Allow several seconds between power-off and power-on switching.

Solution/Action

First, check the Show Options display and verify the model of the spectrum analyzer is correct as displayed. Press the following softkeys:

Preset
Config
More 1 of 3
Show Options

To exit the display, press Exit Show.

If the model information is correct, check the Edit Flatness display to verify that there is flatness correction information stored in the analyzer. Press the following softkeys:

Service Cal, Flatness Data
Edit Flatness

To exit, Press More, Exit

If the spectrum analyzer has flatness data, check the Display Cal Data screen. Press the following Keys:

CAL, More 1 of 4, More 2 of 4
Service Diagnostics, Display Cal Data

Check for Cal Attenuation error data s under the CA ATT ERR column. Press Next Page and check the TCXO dac setting in the first column. If Option 004, skip this check.

If you are missing the necessary data described above, it will have to be generated according to the procedures in the Adjustment chapter of the service manual. Reference Chapter 3, "Spectrum analyzer Initialization":

Firmware start-up sequence *

Set the default configuration
Reset the power-on units
Reloading the correction constants
Reloading the flatness-correction constants
Reload the A12 step-gain-correction constants
Reload the differential phase calibration constant (Option 107 only)

* Here is the full range of codes to ID the model correctly in the Show Options display.

The analyzer model will be correct as far as the firmware is concerned, the Show Options screen will be in error. The ID code controls what letter is displayed in the Show Options screen. There four codes that can be entered using the Change Title and Execute Title soft-key commands.

FACTSET 68,1; This command will cause the ID letter to be a "D"
FACTSET 68,0; This command will cause the ID letter to be an "L"
FACTSET 11023,1; This command will cause the ID letter to be a "C"
FACTSET 11023,0; This command will cause the ID letter to be an "E"

The following softkey strokes are used to enter and execute the ID code. This example will use the FACTSET ID code to specify 8591C CATV analyzer.

PRESET
DISPLAY, Change Title

Using the softkeys enter the following code:

FACTSET 11023,1; (; at end of the ID code is a must)

Then press:

DISPLAY, Hold (on D and L model, just press the HOLD above the RPG knob)
CAL, More 1 of 4, More 2 of 4
Service Cal, Execute Title

To verify that the Show Options display correctly identifies the model for the FACTSET ID code entered (in this case, the 8591C).

Press the following keys:

PRESET
CONFIG, More 1 of 3
Show Options

Check that the display shows HP 8591C, then press Exit Show