S E R V I C E N O T E

SUPERSEDES: None

35653A/B/C

Serial Numbers: 0000A00000 / 9999Z99999

Using the RS-232 Port to enable the CAL signal onto the 35650A rear panel CAL BNC

To Be Performed By: Agilent Technologies-Qualified Service Personnel

Parts Required:

35654-90011 3565S System Reference Manual
RS-232C Cable PC with RS-232C port and VT-100 terminal software
Test Equipment as listed in the System Reference Manual
This Service Note Procedure

Situation:

The 3565S System Reference Manual refers to an automated procedure that verifies the accuracy of the built-in calibration signal within the 35653A/B Source Modules. The automated procedure runs in obsolete Computer Hardware / Software which is no longer supported. This service note, along with the System Reference Manual, provides a procedure to enable and verify the calibration signal's accuracy.

Continued

DATE: June 2000

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
INFORMATION ONLY		
AUTHOR: MJL	ENTITY: A100	ADDITIONAL INFORMATION:

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Solution / Action:

The following procedure uses the RS-232C port on the 35651/54 GPIB/Signal Processor Module to access the built-in diagnostics, and to send the commands to enable the 35653A/B Calibration Signal to be turned on and off. Together with the System Reference Manual, the Calibration signal, and the rest of the performance tests for the remaining modules can be performed manually, without the need for a Series 200/300 controller.

Procedure:

This procedure is used to enable the Calibration Signal, which is normally performed by the automated software. The procedure to check the Calibration Signal is located from pages 3-21 to 3-27 in the System Reference Manual. This Service Note Procedure replaces Step 2 on page 3-26.

Before you begin this procedure you must have a PC, with an RS-232C COM port and RS 232 cable installed between the PC and the 35651/54 RS-232C connectors. You must also have opened a terminal window on your PC and have it set to emulate a VT-100 terminal type, and set to 8N1. Also, no cables other than the power line, the RS-232C cable, and a BNC cable connected to the 35650 mainframe CAL BNC. The Cal Signal is connected to the Agilent 35670A Dynamic Signal Analyzer or equivalent as directed in the 3565S System Reference Manual.

Follow the procedure in the manual, starting at page 3-21. When you get to Step 2 on page 3-26, substitute the following for this step only. When you have finished with this procedure, continue with Step 3 on page 3-26.

1. Switch the 35650A mainframe power on and watch the terminal screen of your PC. You will see information about the Signal Processor module (the screen should look like page 4-2 in the System Reference Manual). If the 35650A mainframe power is already on, press the red reset button on the 35651/54 module.

2. Press "T" without the quotes and follow the directions on page 4-4 and 4-5 to set the terminal type to EM100. Once the terminal type has been set, you will be returned to the main screen.

3. Press "D" without the quotes to enter into the diagnostic program.

NOTE

The following instructions on how to use the diagnostic program can be found on pages 4-1 through 4-20 of the System Reference manual.

4. Tab to "Choose Module/Mainframe" and press return.

5. Tab to the HP35653A/B module and press return. Make sure the HP35653A/B is now underlined before proceeding.

6. Tab back to where you can select "Send Command" and press return.

Continued

7. In the first bracked line, type in "ICAL 1" without the quotes and press return. This command (ICAL <space> number one) will turn the internal calibration signal ON, and enable it onto the 35650 rear panel CAL BNC. Use either of the two BNC to connect between the mainframe and your analyzer's input channel.

8. Begin following the rest of the procedure in the System Reference Manual (starting with Step 3 to setup and make the measurement verifying the calibration signal's accuracy.

9. Once your measurement is complete and you have marked the measured value on the test record as stated in Step 5 on page 3-27, follow the next step to turn the Calibration Signal off.

10. Use the "Send Command" feature in the diagnostic window and type in "ICAL 0" without the quotes and press return. This command (ICAL <space> zero) will turn the calibration signal OFF.

This completes the procedure to verify the accuracy of the built-in calibration signal of the 35653A/B/C module.