

MODIFICATION AVAILABLE – PERFORMANCE ENHANCEMENT
 CHARGEABLE TO CUSTOMER SERVICE / RELIABILITY
 ENHANCEMENT CHARGEABLE TO CONTRACT IF THERE IS ONE.

86030A-03

S E R V I C E N O T E

Supersedes:
 NONE

86030A 50GHz Lightwave Component Analyzer

Serial Numbers: [0000A00000 / 9999Z99999]

Create a new performance verification file and backup disk after a Lightwave Test Set (86032A) has been factory repaired or calibrated.

To Be Performed By: Agilent-Qualified Personnel or Customer

Parts Required:

P/N	Description	Qty.
86030A	50GHz Lightwave Component Analyzer (Customer System)	1
83440D	Lightwave Converter O/E (Customer Verification Device)	1
85056A	2.4mm Calibration Kit	1
86030-10001	Floppy Disk, System Data (for System SW Rev. B.01.07 or earlier)	1
OR		
86030-10003	Floppy Disk, Verification Data (for System SW Rev. B.01.08 or later)	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
MODIFICATION AVAILABLE		
ACTION CATEGORY:	AGREEABLE TIME	<input type="checkbox"/> PERFORMANCE ENHANCEMENT <input checked="" type="checkbox"/> SERVICE / RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE <input checked="" type="checkbox"/> ON-SITE <input type="checkbox"/> SERVICE CENTER	AVAILABLE UNTIL: Life of the product.
AUTHOR: RBS PRODUCT LINE: 8F		
ADDITIONAL INFORMATION:		

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Situation:

After an 86032A Test Set is serviced (Repair or Calibration), its performance may have changed slightly. After it is re-installed into a customer 86030A system, it is recommended that the performance of the system be characterized using the customer verification device (83440D Lightwave Detector).

The procedure creates a text file which characterizes the customer verification device on the customer 86030A system. It may be used in the future as a 'benchmark' against which the customer can verify the measurement integrity of their system.

The file created is specific to the customer verification device, and it is stored on the system hard drive for use during the 'System Verification' routine. It is also backed up on a floppy disk for system recovery purposes.

NOTE: Creating this disk is NOT a requirement in the normal operation of the 86030A.

On new 86030A systems this verification file and disk is created by the factory, but after an 86032A test set is serviced following original shipment, a new verification file and disk should be created onsite using the customer system and customer verification device.

The procedure used depends on the revision of software installed on the customer 86030A.

Solution/Action:

Specifications: None. Characterization only.

PART I. Determine the 86030A SW Revision.

- A. On the customer's calibrated 86030A system, launch the LCA 50GHz Main software and select the "About" menu. Note the software revision and exit the LCA 50GHz Main software.
- B. If SW Version is B.01.08 or later, continue with Step C, otherwise go to Step D.

PART II. Create the file.

- C. For SW Version B.01.08 or later, open the ConfigVerDevSN.ini file in D:\LCA50GHz\Configsys directory. In this file there is a five digit number which must match the last five digits of the customer verification device (83440D) serial number. If they match, skip to Step D, otherwise:
 - i. Edit the file to make it match the last five digits of the 83440D Serial Number.
 - ii. Save the file back into the same directory, D:\LCA50GHz\Configsys
 - iii. Copy this file onto floppy disk 86030-10003 (replace existing file). This will serve as a backup.
- D. On the customer's calibrated 86030A system, launch the LCA 50GHz Main software. Select Options, then System Verification.
- E. Follow all instructions as presented on screen.

For the DUT, use the customer verification kit device (83440D).

- F. Complete the system verification.
- G. An Excel chart will open showing the response. The results may indicate “FAIL”, however, this is normal since the verification file has not yet been created or is using older data.
- H. Exit Excel, go back to the LCA 50GHz Main software. Adjust the 8510 scale so the response of the verification device is on the screen. Examine the results for any suck outs or abnormalities. If the response looks good, continue, otherwise restart the kit device procedure and look for damaged connectors.
- I. Save the response of the kit device to the 86030A system hard drive and floppy (86030-10001 or 86030-10003) by:
 - i. Select File→Save Data→Text File→Form Log Mag
 - ii. Perform **ONE** of the following two steps (a OR b) depending on 86030A SW revision:
 - a. For systems with SW Version B.01.07 or earlier:**
 - Insert floppy 86030-10001 into the system controller.
 - Save the file as A:\lwwZZZZZ where ZZZZZ is the last five digits of the Test Set (86032A) serial number.
 - Confirm that the correct serial number is recorded on the floppy disk label.
 - Copy this file into the following directory on the 86030A System Controller: C:\LCA50GHz\Calibration\
NOTE: If it prompts ‘Replace existing file?’ Click ‘Yes’.
 - OR**
 - b. For systems with SW Version B.01.08 or later:**
 - Insert floppy 86030-10003 into the system controller.
 - Save the file as A:\lwwXXXXX where XXXXX is the last five digits of the customer verification device (83440D) serial number.
 - Confirm that the correct serial number is recorded on the floppy disk label.
 - Copy this file into the following directory on the 86030A System Controller: D:\LCA50GHz\Calibration\
NOTE: If it prompts ‘Replace existing file?’ Click ‘Yes’.
- J. On the 86030A, exit the LCA 50GHz Main software.

PART III. Check the file.

- K. On the 86030A system, launch the LCA 50GHz Main software.
- L. Re-run the System Verification test, following all instructions (Steps A to E above).
- M. This time, the results must indicate “PASS”. Examine the results to insure the data fits easily between the upper and lower limit lines.

END PROCEDURE.