S E R V I C E N O T E

SUPERSEDES: 8751A-06
8751A-06A, 8751A-06B

8751A Network Analyzer

Serial Numbers: 0000J00000 / 3123J00523
0000A00000 / 3123A00114

Modification to fix the A4 (Rev E or below) power-on test failure

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Qty	Description
08751-66504	1	A4 RF & LO OSC Re-built assembly

Situation:
The above serial numbered 8751As may fail the power on test in where the first failed test is “22: 1st LOCAL OSC” in the executed internal tests: 1 to 18, 22, 23, 25, 26, and 29.

Continued

DATE: 24 Septemeber 1993

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	☐ IMMEDIATELY ■ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS:	Labor 3.0 hrs
LOCATION CATEGORY:	☐ CUSTOMER INSTALLABLE ☐ ON-SITE ■ SERVICE CENTER	SERVICE INVENTORY:	☐ RETURN ☐ SCRAP ■ SEE TEXT
		USED PARTS:	☐ RETURN ■ SCRAP ☐ SEE TEXT
AVAILABILITY:	PRODUCT’S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: November 1995	
AUTHOR: MT	ENTITY: 3355	ADDITIONAL INFORMATION:	

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NOTE: Procedure to find the first failed test

1. Press [SYSTEM], ‘SERVICE MENU’, ‘TESTS’.

2. Press the upper arrow key or lower arrow key to find the first occurrence of a FAIL message for 1 through 22.

When “POWER ON TEST FAILED” is displayed at power-on, perform this procedure to find the first failed test. If the first failed test is “22: 1st LOCAL OSC”, the trouble is applicable to this service note.

- This will be caused by A4, RF & LO OSC assembly does not work properly.
- The A4 assembly has been re-designed to resolve the problem.
- All A4 assemblies currently being supplied for replacement are the re-designed version.

Solution/Action:
Perform the following procedure.

1. Remove the top cover from the 8751A.

2. Disconnect the semi-rigid cable “H” both from A4J102 and A5J8, and remove the semi-rigid cable.

3. Remove two screws restraining a plate over the A4 assembly, and remove the plate.

4. Disconnect all RF cables from A4 assembly.

5. Remove the A4 assembly from the 8751A.

6. Check if the A4 PC-board revision is E-xxxx or below. The revision code is silk-printed at the left bottom corner of the component side on the A4 assembly. If the revision is E-xxxx or below, replace the A4 assembly with a new one (P/N 08751-66504). Do NOT use an exchange board for this replacement.

NOTE 1.
Exchange board (P/N 08751-69504) can NOT be used for this replacement, because the A4 assembly which has the failure mentioned in “Situation” can NOT be repaired any more.

NOTE 2. I

If the A4 PC-board revision is F-xxxx or above, the A4 PC-board is a re-designed one, so that the trouble is not applicable to this service note. In this case, re-install the A4 assembly, connect all cables, and perform the following adjustments. If the adjustments do not resolve the power on test failure, replace the A4 board.

- RF Oscillator Frequency Adjustment
- 1st Local Oscillator Adjustment

7. Reassemble the 8751A.

8. If the A4 board is replaced, perform the following adjustments and performance tests. The adjustment procedures are provided in the 8751A Service Manual (pn 08751-90031) and the performance test procedures are provided in the 8751A Maintenance Manual (pn 08751-90030).

Adjustments required after replacing A4 assembly:

- RF Oscillator Frequency Adjustment
- 1st Local Oscillator Adjustment
- LF Power Linearity Correction Constants
- Performance tests required after replacing A4 assembly
- Frequency Range and Accuracy Test
- Harmonics
- Non-Harmonics
- Phase Noise
- Source Level Accuracy/Flatness
- Non Sweep Power Linearity
- Power Sweep Linearity
- Receiver Noise Level
- Trace Noise
- Residual Response
- Input Crosstalk