

S E R V I C E N O T E

SUPERSEDES: None

4396A Network Spectrum Analyzer

Serial Numbers: 0000J00000 / 3241J00146

Duplicate Service Notes: None

“POWER ON TEST FAILED” or “PHASE LOCK LOOP UNLOCKED” at Low Temperature

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

Part No.	Qty.	Description
04396-69513	1	A3A2 2nd LO (Re-Built Assembly)

Situation:

The above serial numbered 4396As may fail the power on self tests because the A3A2 2nd LO does not work properly at low temperature. When turning the analyzer on after keeping it at low temperature (lower than 5deg C), a “POWER ON TEST FAILED” OR “PHASE LOCK LOOP UNLOCKED” message may appear.

Continued

DATE: 10 June 1993

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:					
MODIFICATION RECOMMENDED					
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	Labor 3.0 hrs		
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		AGILENT RESPONSIBLE UNTIL: 30 June 1995		
AUTHOR: TS	ENTITY: 3355	ADDITIONAL INFORMATION:			



Solution/Action:**When “POWER ON TEST FAILED” is displayed at power on:**

Press [System], {SERVICE MENU}, and {TESTS}. Then press the upper arrow keys to find the first occurrence of a FAIL message for internal tests 1 through 16. If “10:A3A2 2ND LO” is the first failed test, replace the A3A2 assembly. For the replacement procedure, see 4396A Service Manual (pn 04396-90101).

If the first failed test is not “10:A3A2 2ND LO”, troubleshoot the analyzer in accordance with 4396A Service Manual.

When “PHASE LOOK LOOP UNLOCKED” is displayed:

Press [System], {SERVICE MENU}, and {TESTS}, [0], [x1], and {EXECUTE TEST} to run the internal test 0:ALL INT. Then press the upper arrow keys to find the first occurrence of a FAIL message for internal tests 1 through 16. If “10:A3A2 2ND LO” is the first failed test, replace the A3A2 assembly. For the replacement procedure, see 4396A Service Manual (pn 04396-90101).

If the first failed test is not “10:A3A2 2ND LO”, troubleshoot the analyzer in accordance with 4396A Service Manual.

After replacing the A3A2, perform the following adjustments and performance tests. Use the 4396A performance test program (pn 04396-65001).

Adjustments required after replacing A3A2 assembly:

- Second Local PLL Lock Adjustment
- Source Mixer Local Leakage Adjustment
- RF OUT Level CC (Correction Constants)
- Spectrum Analyzer Absolute Magnitude CC
- Network Analyzer Absolute Magnitude CC

Performance tests required after replacing A3A2 assembly:

- Source Level Accuracy/Flatness Test
- Non-Sweep Power Linearity Test
- Power Sweep Linearity Test
- Harmonics/Non-Harmonic Spurious Test
- Input Crosstalk Test
- Absolute Amplitude Accuracy Test
- Noise Sideband Test
- Frequency Response Test
- Other Spurious Test
- Residual Response Test