MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

E4915A-04

S E R V I C E N O T E

Supersedes:
None

Agilent E4915A Crystal Impedance Meter

Serial Numbers: JP1KD00150/JP1KD00159

Warning message of "W69 Out of Srch Range" due to defective A1 main board

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
E4915-66531	A1 Main Board	1
E4915-69531	A1 Main Board (rebuilt exchange)	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **MODIFICATION RECOMMENDED**			
ACTION CATEGORY:	[ ] IMMEDIATELY x ON SPECIFIED FAILURE [ ] AGREEABLE TIME	STANDARDS: LABOR: 3.0 Hours	
LOCATION CATEGORY:	[ ] CUSTOMER INSTALLABLE [ ] ON-SITE X SERVICE CENTER	SERVICE INVENTORY: [ ] RETURN [ ] SCRAP [ ] SEE TEXT	USED PARTS: X RETURN [ ] SCRAP [ ] SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: November 2004	
AUTHOR: HK	PRODUCT LINE: WN		
ADDITIONAL INFORMATION:			

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Agilent Technologies

November 13, 2002

Situation:

The E4915A equipped with old A1 Main board (P/N E4915-66521) may display a warning message of " W69 Out of Srch Range " when measuring a crystal resonator or filter at frequencies near 55 MHz. As a result, measurement is disabled. The PLL frequency synthesizer of the A1 Main board that fails in phase-lock causes this problem. To verify if the PLL is unlocked, check the source output signal at –5 dBm at 55 MHz by using a spectrum analyzer. Figure 1 shows an example of unlocked source signal on spectrum display compared to normal source signal (Figure 2).

Figure 1. Spectrum of unlocked source signal

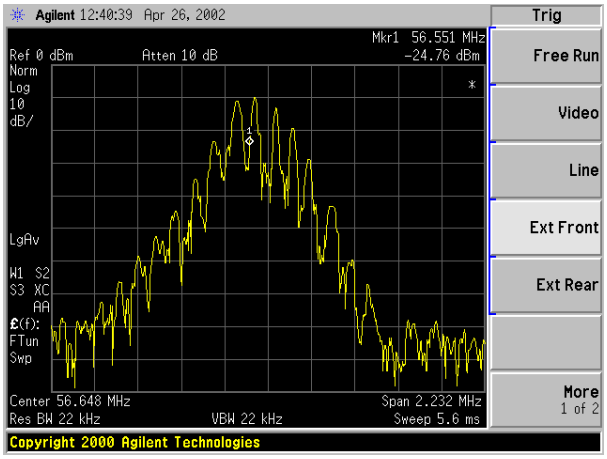
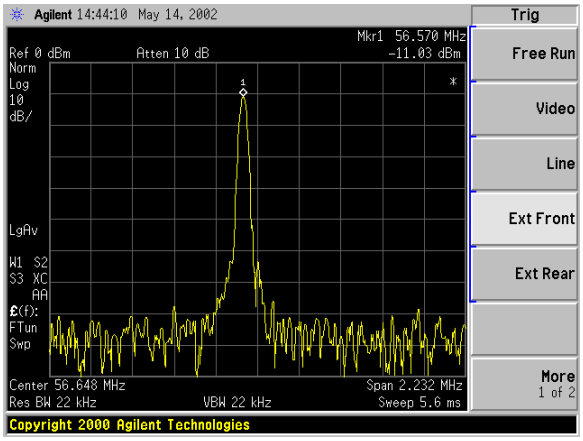


Figure 2. Spectrum of locked source signal



The same problem may occur in the following frequency ranges:

1.7MHz to 1.82MHz
3.5MHz to 3.75MHz
7MHz to 7.5MHz
14MHz to 15MHz
28MHz to 30MHz
54.5MHz to 58.5MHz
112MHz to 120MHz
180MHz to 192MHz

Solution/Action:

Replace the old A1 board with new A1 board (P/N E4915-69531).