

MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

E4402B-08

S E R V I C E N O T E

Supersedes:
None

E4402B 3.0 GHz ESA Spectrum Analyzer

Serial Numbers U.S. Manufactured: US40242096 / US41192850

Serial Numbers Malaysia Manufactured: MY41000003 / MY41000044

Defective Field Effect Transistors may cause L.O. Unlevel or Source L.O. Unlevel error message(s) on the display of the ESA.

To Be Performed By: Agilent Service Centers Only (ESA Adjustment & performance test software is required to perform the rework.)

Parts Required:

P/N	Description	Qty.
E4403-69069	RF Assy. w/o option 1D5	1*
E4403-69071	RF Assy. w/ option 1D5	1*
E4404-69028	L.O. Amp/I.F. Switch Assy	1#
E4403-69041	Tracking Gen. Ctrl. Board Assy	1@

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: 12.0 Hours
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
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AUTHOR: BD	PRODUCT LINE: 12	AGILENT RESPONSIBLE UNTIL: End of GMS	
ADDITIONAL INFORMATION: Send suspect assemblies via the exchange process since these assemblies are on the exchange program.			

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- * Order the correct RF assembly based on if the instrument has option 1D5 or not.
- # Order this assembly if the model is E4404B, E4405B, E4407B, E4408B, E7403A, E7404A, or E7405A. The L.O.I.S. only goes into models that are 6.7 GHz and higher in frequency.
- @ Order this assembly only if the instrument has option 1DN.

Situation:

Instruments within the listed serial range may fail and display one of two error messages on the analyzer screen. The error messages are L.O. Unlevel and Source L.O. Unlevel. The error messages depend on instrument model and options. If the error messages on the ESA or EMC Analyzer display are “L.O. Unlevel” the Front End/L.O. board in the RF assembly on the following models can cause this:

E4402B, E4403B, E4404B, E4405B, E4407B, E4408B, E7402A, E7403A, E7404A, and E7405A. The L.O. Amp/I.F. Switch only on the following models can also cause this message:

E4404B, E4405B, E4407B, E4408B, E7403A, E7404A, and E7405A.

The L.O. Amp/I.F. Switch assembly is NOT used in models E4402B, E4403B, and E7402A. Therefore, if an L.O. Unlevel message occurs on the one of these models, only the RF assembly should be changed out. All other models should have both the RF assembly and the L.O. Amp/I.F. Switch assembly changed out.

If the error message is “Source L.O. Unlevel”, the 3.0 GHz Tracking Generator Control board assembly can be the cause. This only relates to instruments with option 1DN, Tracking Generator. NOTE: Assemblies should ONLY be changed if one of the two error messages is displayed on the analyzer screen. The RF assembly has (4) 1855-1096 F.E.T.’s loaded on it. The L.O. Amp/I.F. Switch has (6) F.E.T.’s loaded on it. The 3 GHz T.G. Control board assembly has (8) F.E.T.’s loaded on it.

Solution/Action:

Agilent Service Centers should replace all suspect assemblies depending on instrument model and option ONLY if the fail description on the returned instrument is L.O. Unlevel or Source L.O. Unlevel.