

MODIFICATION RECOMMENDED –  
CORRECTS MANUFACTURING OR DESIGN DEFECTS

**E4418B-12**

**S E R V I C E N O T E**

Supersedes:  
NONE

**Agilent E4418B EPM Average Power Meter**

**Serial Numbers: GB41298752/GB41299169**

**Latent Defect Causes Calibrator To Fail Built In Self Test**

**To Be Performed By: Agilent-Qualified Personnel or Customer**

**Parts Required:**

<b>P/N</b>	<b>Description</b>	<b>Qty.</b>
E4418-60031	Processor Board Kit	1

**ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:			
<b>MODIFICATION RECOMMENDED</b>			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR: 1.0 Hours
LOCATION CATEGORY:	<input checked="" 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: FC      PRODUCT LINE: PN		AGILENT RESPONSIBLE UNTIL: 20-Feb-2005	
ADDITIONAL INFORMATION: Service Inventory has been inspected and is unaffected. Service Centers will return Used Parts via the standard BOP process.			

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**Situation:**

A batch defect with component Q11 on the Processor Board assembly has been identified. This component is a transistor within the power reference oscillator circuit.

If a Processor Board assembly has been fitted with a defective Q11, it will fail the built in self test (BIST), highlighting an issue with the "Calibrator" test.

Important note - as BIST is an integral part of the manufacturing test strategy, Agilent is confident that no units have been knowingly shipped with this defect. Although there is no evidence to suggest that the defect may manifest itself at some later date, this service note has been created to cover such a possibility.

**Solution/Action:**

If any of the units listed above are received at the service center and are exhibiting this fault, then perform the following procedure:

- Remove and replace the Processor Board, as per the installation note supplied with the kit.
- Update the details stored on the Processor Board to reflect the identity of the power meter. Details of this procedure can be found in the installation note.
- Ensure the Processor Board is programmed with the current firmware revision. The firmware and a PC based download utility are available as no-charge downloads from the 'Agilent.com' website. The following URL provides a shortcut to the power meter & sensor product pages:  
<http://www.agilent.com/find/powermeters>
- Verify that all of the Built In Self Test tests pass.
- Verify that the 1mW reference power level meets the published specification. Details of this procedure can be found in the Service Manual.
- The repair and verification process is now complete.