

MODIFICATION RECOMMENDED

34401A-16

S E R V I C E N O T E

Supersedes:
NONE

34401A Multimeter

**Serial Numbers: MY47029713 thru MY47039080
SG47001093 thru SG47001437**

The problem: The instrument may not show the correct voltage, when measuring a voltage in the range of -67 to -124 volts DC.

Parts Required:

P/N	Description	Qty.
1826-8762	U104 OP Amp TI MPN(PA130UA)	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" 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 <input type="checkbox"/> CHANNEL PARTNER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT	USED PARTS: <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE NO CHARGE AVAILABLE UNTIL: August 1, 2014		
AUTHOR: RAC	PRODUCT LINE: SP		
ADDITIONAL INFORMATION: Please refer to Service note 34401A-15A as many of the same serial numbers are affected.			

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Situation:**Abnormal operation:**

There are two ways to cause the 34401A to read incorrectly.

The first way is if you are in Autorange mode and measuring a DC voltage in the range of 1.2Volts to -1.2volts. If the input changes quickly to a voltage in the range of -67 to -124 volts DC you can get an incorrect reading about 20% of the time.

The second way this problem can occur is for the 34401A to be set to the 1Volt range and have an input voltage of between -67 to -124 volts DC applied to the input.

Solution/Action:Test and if necessary repair or exchange unit:

Do not repair unless testing verifies the problem is present

Test Equipment Required:

Fluke 5520A Calibrator or equivalent

Test procedure:

1. Attach the 34401A to the calibrator and Set the calibrator to -80 Volts DC.
2. Set the 34401A to manual range on the 1Volt range.
3. If the display does not read overload then exchange or repair the unit.

Special requirements for repair:

- Standard ESD methods
- Clean handling
- Hi-Z approved soldering methods
- Standard SMT methods
- Recalibrate after installation

This should be the standard process for this product.

Repair Procedure:

U104 should be removed and discarded. The picture below shows where U104 is located on the main board. The bottom of the pictures, are the back of the unit. You should replace U104 with part number 1826-8762. Standard SMT equipment and procedures should be used to prevent damaging the board. High Z processes need to be used as well to prevent degradation of the specifications. Exchange units are available if you are unsure of your capabilities in performing this repair. After the part has been changed the unit needs to be recalibrated.

