

MODIFICATION RECOMMENDED

34460A-02

S E R V I C E N O T E

Supersedes:
None

34460A 6 ½ Digit Multimeter

Serial Numbers: A table of all affected serial numbers is provided at the end of this service note. Use an electronic search/find to determine if the serial number of your DMM is included in the list.

Various instruments may exhibit an accelerated DCV drift rate which exceeds product specifications.

Parts Required:

P/N	Description	Qty.
None		

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: MODIFICATION RECOMMENDED		
ACTION ON SPECIFIED FAILURE CATEGORY: X AGREEABLE TIME	STANDARDS LABOR: 0.5 Hours	
LOCATION X CUSTOMER INSTALLABLE CATEGORY: <input type="checkbox"/> ON-SITE (active On-site contract required) X SERVICE CENTER <input type="checkbox"/> CHANNEL PARTNER	SERVICE <input type="checkbox"/> RETURN INVENTORY: <input type="checkbox"/> SCRAP X SEE TEXT	USED <input type="checkbox"/> RETURN PARTS: <input type="checkbox"/> SCRAP X SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: October 1st, 2015	
<input type="checkbox"/> Calibration Required X Calibration NOT Required	PRODUCT LINE: GM AUTHOR: JD	
ADDITIONAL INFORMATION:		

Situation:

Approximately 10% of the 34460A DMMs identified at the end of this service note may exhibit an accelerated DCV drift rate which exceeds the product specification. 34460As whose DCV drift exceeds the limits contained in this service note must be replaced.

Solution/Action:

The following instructions apply to customers who are 'self-maintainers' and have the equipment necessary to perform the procedure. Customers who do not have the required equipment (or equivalent) should return the instrument to a Keysight Service Center for testing. The service center should also be provided with the date the instrument was placed into service.

Equipment Required:

A metrology grade 10 VDC source (Fluke 5720, Fluke 5700, Fluke 732, or equivalent).

Procedure:

1. Determine the date the DMM was placed into service.

The limits against which the DCV drift is measured are relative to when the 34460A was placed into service.

Date of Test: _____ (today's date)

Start of Use: _____

Note – if the 34460A has been re-calibrated within its first year of operation, use the date of the last calibration as the 'Start of Use' date.

2. Select the test limits.

Date of Test – Start of Use: \leq 3 months	90 Day Specification \pm (% of reading + % of range) 0.0050 + 0.0005		
	Lower Limit	Measured	Upper Limit
	9.99945V		10.00055V

Date of Test – Start of Use: > 3 months, < 12 months	1 Year Specification \pm (% of reading + % of range) 0.0075 + 0.0005		
	Lower Limit	Measured	Upper Limit
	9.9992V		10.0008V

3. Turn on the 34460A and allow the instrument to warm up for 1 hour.
4. Set the 34460A function to DCV, the range to 10 VDC, the aperture to 10 NPLC, and Auto Zero On.
5. Connect a Fluke 5720, Fluke 5700, Fluke 732, or equivalent to the HI and LO Input of the 34460A and set the source to output 10 VDC.
6. Set the 34460A to make a Single measurement:

Acquire → Trigger Settings → Trg Src → Single
7. Once the source output has settled, press Single on the 34460A.
8. Record the reading and compare it to the test limits based on the period between the date of test and the start of use.
9. If the measured voltage is within the test limits the unit can be returned to service.
10. If the measured voltage exceeds the test limits, the instrument must be replaced. Contact your Keysight Sales and Service Office and mention the 34460A has failed the drift test per Service Note 34460A-02 and must be replaced. Provide the serial number of the instrument and indicate which options (LAN, GPB, SEC) are installed. An instrument with the GPIB option will have the connector on the back of the instrument. The LAN and security options (if installed) will be listed in the 'About' window by pressing:

Shift → Help → About

Note that the defective instrument will be exchanged with a new instrument and new serial number. The serial number of the defective instrument will not be transferred.

Affected Serial Numbers:

MY53100751	MY53100783	MY53100811	MY53100841	MY53100910
MY53100756	MY53100784	MY53100812	MY53100842	MY53100911
MY53100757	MY53100785	MY53100813	MY53100843	MY53100912
MY53100758	MY53100786	MY53100814	MY53100844	MY53100913
MY53100759	MY53100787	MY53100815	MY53100845	MY53100914
MY53100760	MY53100788	MY53100816	MY53100846	MY53100915
MY53100761	MY53100789	MY53100817	MY53100847	MY53100916
MY53100762	MY53100790	MY53100818	MY53100848	MY53100918
MY53100763	MY53100791	MY53100819	MY53100849	MY53100919
MY53100764	MY53100792	MY53100820	MY53100850	MY53100920
MY53100765	MY53100793	MY53100821	MY53100851	MY53100921
MY53100766	MY53100794	MY53100822	MY53100852	MY53100922
MY53100767	MY53100795	MY53100823	MY53100853	MY53100923
MY53100768	MY53100796	MY53100824	MY53100854	MY53100924
MY53100769	MY53100797	MY53100825	MY53100855	MY53100925
MY53100770	MY53100798	MY53100826	MY53100856	MY53100926
MY53100771	MY53100799	MY53100827	MY53100863	MY53100927
MY53100772	MY53100800	MY53100828	MY53100864	MY53100928
MY53100773	MY53100801	MY53100829	MY53100890	MY53100929
MY53100774	MY53100802	MY53100830	MY53100891	MY53100930
MY53100775	MY53100803	MY53100832	MY53100902	MY53100931
MY53100776	MY53100804	MY53100833	MY53100903	MY53100932
MY53100777	MY53100805	MY53100834	MY53100904	MY53100936
MY53100778	MY53100806	MY53100835	MY53100905	MY53100937
MY53100779	MY53100807	MY53100836	MY53100906	MY53100938
MY53100780	MY53100808	MY53100838	MY53100907	MY53100940
MY53100781	MY53100809	MY53100839	MY53100908	
MY53100782	MY53100810	MY53100840	MY53100909	

Revision History:

Service Note Revision	Date	Author	Reason For Change
01	9-10-14	JD	As published