34465A-02

Modification Recommended Service Note

Supersedes:
NONE

34465A Digital Multimeter, 6½ Digit

Serial Numbers: MY50000000-MY57506700.

The Problem – Keysight 34460A/34461A/34465A/34470A Digital Multimeter with firmware version below "FW 2.17" may experience ACV out of specification.

Parts Required:

P/N	Description	Qty.
NONE		

ADMINISTRATIVE INFORMATION

ACTION CATEGORY:	X ON SPECIFIED FAILURE [ ] AGREEABLE TIME	STANDARDS LABOR: 1 Hour			
LOCATION CATEGORY:	[ ] CUSTOMER INSTALLABLE [ ] ON-SITE (active On-site contract required) X SERVICE CENTER [ ] CHANNEL PARTNERS	SERVICE INVENTORY:	X RETURN [ ] SCRAP [ ] SEE TEXT	USED PARTS:	[ ] RETURN [ ] SCRAP [ ] SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: 17 April 2019			
X Calibration Required [ ] Calibration NOT Required		PRODUCT LINE: GM AUTHOR: WY			

ADDITIONAL INFORMATION:

Situation:

User may experience ACV out of specification when frequent function changing from other measurement functions to ACV. This happens mostly during automated process causing the component U507 to heat up and ACV measurement to drift out of specification.
This has been resolved in Firmware 2.17 and above.

Solution/Action:

For units out of specification, contact your nearest local Keysight Service Center to send unit for repair.
(Remark : Please ensure all the units currently in use are loaded with FW 2.17 and above)

At Keysight service center:

1. Perform standard verification using STE9000.
2. If unit fails at ACV test points, set DMM function to ACV and manual range 1V.
3. Provide 1V @ 1kHz input into the DMM. If DMM measured values are hovering around 40% of full scale then disassemble the unit and perform the following verification steps:
    i. After power on, measure the body temperature of U507 and check if it rises to more than 100C within 20seconds. This indicates a defective U507.
    ii. Visual inspect if the soldering at U507 turns yellowish. This also indicates a defective U507.
4. Replace the component U507 (1826-3738).
5. Perform self-test, full calibration (adjustments and verification). Ensure all tests pass with no errors.
6. Provide 1V @1kHz input into the DMM again, then measure ACV value should be close to 1V.

Revision History:

Date	Service Note Revision	Author	Reason for Change
17 April 18	05	WanYee	As Published