

U1253B-08

# Modification Recommended Service Note

Supersedes:  
NONE

## U1253B Handheld Digit Multimeter

Serial Numbers: "See Appendix (A)"

**The Problem** – Capacitance measurement may be out of specification at 100nF range and below.

### Parts Required:

P/N Description Qty.  
Pomona 2BC-36 double banana plug both ends cable assembly

### ADMINISTRATIVE INFORMATION

ACTION	<input checked="" type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS	
CATEGORY:	<input type="checkbox"/> AGREEABLE TIME	LABOR:	0.1 Hours
LOCATION	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE	SERVICE:	<input type="checkbox"/> RETURN
CATEGORY:	<input type="checkbox"/> ON-SITE (active On-site contract required)	INVENTORY:	<input type="checkbox"/> SCRAP
	<input type="checkbox"/> SERVICE CENTER		<input type="checkbox"/> SCRAP
	<input type="checkbox"/> CHANNEL PARTNERS		<input checked="" type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL:	20 April 2017
	<input type="checkbox"/> Calibration Required	PRODUCT LINE:	WC
	<input checked="" type="checkbox"/> Calibration NOT Required	AUTHOR:	SJ

ADDITIONAL INFORMATION:

### Situation:

U1253B within the serial number range may not meet the specification for capacitance measurement in 100nF range and below. This is due to improper open adjustment performed at factory which the cable has been used to perform the open adjustment, has caused a negative offset stored in the multimeter's memory.

### Solution/Action:

To verify whether the multimeter is impacted with capacitance measurement in 100nF range and below:

1. Turn the knob to the Capacitance measurement position.
2. Manual set the range to 10 nF range.
3. Plug in one end of the Pomona 2BC-36 cable assembly across the capacitance measurement terminal, leave the other end of the cable assembly open.
4. The U1253B should read between 0.8nF to 1.1nF, otherwise the "Open" calibration adjustment was performed incorrectly.

To correct the multimeter capacitance measurement in 100nF range and below:

5. Unplug any cable from the multimeter's terminal.
6. Turn the knob to the Capacitance measurement position.
7. By referring to the service guide procedure (<http://literature.cdn.keysight.com/litweb/pdf/U1253-90035.pdf>), unsecure the meter to enter into the calibration adjustment mode.
8. Perform **ONLY** the "Open" adjustment in Capacitance measurement without any cable connected to the multimeter.
9. Exit calibration adjustment mode after the "Open" adjustment is done.
10. Verify the "Open" adjustment has been performed correctly by repeating step 1 to step 4.

Customers who have purchased the U1253B Multimeter within the serial number range stated in this service note will receive a complementary Pomona 2BC-36 cable assembly. Each customer is entitled to one free Pomona 2BC-36 cable assembly.

To request a free Pomona 2BC-36 cable assembly, please click [HERE](http://www.keysight.com/find/pomona2BCcablerequest) (<http://www.keysight.com/find/pomona2BCcablerequest>) and provide the following information on the web form:

1. Instrument Model Number
2. Serial Number
3. Name of distributor who sold this unit
4. Date of purchase
5. Delivery details:
  - Receiver's Name
  - Receiver's Address
  - Receiver's Telephone number

Keysight will arrange for the shipment of the free Pomona 2BC-36 cable assembly to the customer.

Revision History:

Date	Service Note Revision	Author	Reason for Change
20 April 2016	01	SJ	As Published

Appendix (A):

MY53410005	MY54070220	MY54160208	MY54170201	MY54250072	MY54300073	MY54330053
MY53450001	MY54070223	MY54170001	MY54170217	MY54260034	MY54300081	MY54330087
MY53450041	MY54070258	MY54170038	MY54170229	MY54260044	MY54300093	
MY53450045	MY54070259	MY54170058	MY54180016	MY54260068	MY54300110	
MY53450047	MY54080006	MY54170095	MY54180031	MY54260098	MY54300136	
MY53450048	MY54080008	MY54170098	MY54180038	MY54260100	MY54300139	
MY54010130	MY54120027	MY54170099	MY54200014	MY54260104	MY54300172	
MY54010133	MY54120048	MY54170109	MY54200108	MY54260145	MY54300199	
MY54040008	MY54120226	MY54170113	MY54200168	MY54260152	MY54300205	
MY54040037	MY54120231	MY54170115	MY54200177	MY54260185	MY54300206	
MY54040038	MY54120240	MY54170118	MY54210059	MY54260186	MY54320023	
MY54070089	MY54160008	MY54170144	MY54220002	MY54260191	MY54320026	
MY54070114	MY54160012	MY54170150	MY54250017	MY54260208	MY54320029	
MY54070122	MY54160030	MY54170155	MY54250019	MY54260228	MY54320043	
MY54070126	MY54160070	MY54170158	MY54250028	MY54280001	MY54330002	
MY54070130	MY54160097	MY54170164	MY54250029	MY54290017	MY54330004	
MY54070136	MY54160106	MY54170178	MY54250035	MY54290023	MY54330023	
MY54070163	MY54160114	MY54170181	MY54250044	MY54290026	MY54330031	
MY54070177	MY54160120	MY54170182	MY54250049	MY54300036	MY54330033	
MY54070184	MY54160146	MY54170185	MY54250055	MY54300056	MY54330046	