

Department of Electrical Engineering and Computer Science EECS

--from Robert A. Leskovec, Electronic Services, August, 2002

HP 34401A Multimeter Troubleshooting Guide:

Problem:

Current Meter Function does not appear to work; no current flow.

1. Perform a *power-on* self test, as follows:
 - a. Turn the instrument off.
 - b. Hold down the “Shift” key as you press the “Power On”, and keep holding down the shift key for more than five seconds until you hear a “beep”.
 - c. Then release the shift key and you should see the word “*TESTING . . .*” in the display. A short while later it should display “*PASS.*”
2. Connect a banana/banana jumper from “Input HI” to “Input LO” and select ohms measurement by pressing “ Ω -2W” button. Reading should indicate approximately 0.005 Ohms.
3. Without changing anything else, unplug the cable end from “LO” and observe that the reading should go to “OVLd MOHM”.
4. Now plug that same end of jumper into bottom Current Input Jack labeled with red letter “I”. Reading should go to approximately “0.500” or lower. If yes, current meter should be working. Check the external setup and connections.
5. If the display still shows “OVLd MOHM”, it means the 3 Amp GMA fuse is blown. This is accessible only from rear, and it is advised that only designated individuals replace it to avoid early failure of the fuse holder itself.
6. Report any problem via e-mail to help@eeecs.cwru.edu Be sure to describe the problem, the unit, and the table number. Put a sign on the unit to warn others. Do NOT use tape.