

3. Moisten a new swab with a cleaning and oiling agent (such as WD40). Work this swab around in each of the four terminals.

The oiling agent insulates the terminals from moisture-related shorting and ensures against false Input Alerts.

Rotary Switch

To clean the rotary switch potentiometer, do the following:

1. Remove the circuit board assembly as described earlier under “Removing and Reinserting the Circuit Board Assembly”.
2. From the back of the circuit board assembly, push the switch shaft in, and remove the polymer thick film (ptf) contact assembly.
3. Clean the ptf contact assembly and the potentiometer on the circuit assembly with alcohol. Blow these parts dry with clean, dry air.
4. Using a Q-tip, apply a thin film of W. F. Nye Gel Lubricant, #813S (Fluke PN 926084), to the entire surface of the ptf pattern and the hole in the center of the pattern. It is important that the grease be applied in a film of consistent thickness such that grease does not accumulate on the ptf wiper contacts. Remove excess grease with a dry Q-tip. No portion of the ptf pattern should be left unlubricated.
5. Push and secure the ptf contact assembly back on to the switch shaft.
6. Reassemble the circuit assembly, the shields, and case halves as described earlier under “Reassembling the Meter Case”.
7. Perform the procedures under “Performance Tests”.

Performance Tests

The following performance tests verify the complete operability of the Meter and check the accuracy of each Meter function against the Meter’s specifications.

Accuracy specifications are valid for a period of one year after calibration, when measured at an operating temperature of 18°C to 28°C and at a maximum of 90 % relative humidity.

To perform the following tests, it is not necessary to open the case; no adjustments are necessary. Merely make the required connections, apply the designated inputs, and determine if the reading on the Meter display falls within the acceptable range indicated.

If the Meter fails any of these tests, it needs calibration adjustment or repair.

A Basic Operability Test

To check the basic operability of an 80 Series III Multimeter, do the following:

1. Turn the rotary switch to Ω and connect a test lead from the $V \Omega \rightarrow \text{---} \text{---}$ to the mA μA inputs. (If you are using a test probe, touch the half of the input contact nearest the LCD.)

The display should read $1.000 \text{ k}\Omega \pm 5$ digits.

2. With the rotary switch still at Ω , test the A input fuse (11 A) by inserting the plug end of the test lead into the A input.

The beeper emits an Input Alert tone if the fuse is good.