

Does your meter measure up?

Are your electrical test tools providing all the safety protection you need?

The only way to know – for sure – is to put your tools to the test and keep score.*



Electrical Measurement Safety Program

- 1 Look for Independent Testing and Certification –**
Verify your test tools have been tested and certified by two or more independent testing laboratories, such as UL in the United States, CSA in Canada and TÜV in Europe.
- 2 Inspect Your Tools –**
National Fire Protection Association (NFPA) Standard 70E says test tools must be visually inspected frequently to help detect damage and ensure proper operation.
 - Check for a broken case, worn test leads or a faded display.
 - Inspect your test leads and probes for frayed or broken wires. Be sure they have:
 - shrouded connectors.
 - finger guards.
 - CAT ratings that equal or exceed those of the meter.
 - double insulation.
 - a minimum of exposed metal on the probe tips.
 - Use the meter’s own continuity testing function to check for internal breaks. Check test lead resistance:
 - A:** Insert leads in V/ Ω and COM inputs.
 - B:** Select Ω , touch probe tips. Good leads are 0.1 – 0.3 Ω .

- 3 Supplementary Inspection –**
NFPA 70E also requires use of only IEC rated test tools.
 - Look for 600 volt or 1000 volt, CAT III or 600 volt, CAT IV rating on the front of meters and testers, and a “double insulated” symbol on the back.
 - Check the manual to verify that the ohms and continuity circuits are protected to the same level as the voltage test circuit.
 - Make sure that the amperage and voltage of meter fuses meets specifications. Fuse voltage must be as high or higher than the meter’s voltage rating.
 - Use the meter’s own test capability to ensure that the fuses are in place and working right.

- Step 1:** Plug test lead in V/ Ω input. Select Ω .
- Step 2:** Insert probe tip into mA input. Read value.
- Step 3:** Insert probe tip into A input. Read value.

A good fuse should show a value close to zero. Check your manual for the specified reading.

Using properly functioning test tools is vital to help protect yourself from possible injury or death. Tools that fail any of these inspections should be replaced with new test tools from a leading manufacturer.

Meter Scorecard

Tested & certified by two or more independent labs	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Visual inspection of tester for cracks or faded display	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Visual inspection of test leads for cracks, CAT rating, etc.	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Test lead continuity	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Rated CAT III 600 or 1000 volt or CAT IV 600 volt	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Tester is double insulated	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Ohms and continuity circuit protection	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
Tester has appropriate fuses and they are working	<input type="checkbox"/> Pass	<input type="checkbox"/> Fail

*Based on NFPA 70E, IEC 61010 and ANSI S82.02 standards.