



Field Guide 7

Inspection and Testing of Multi-Meters



DO!

- Look for NRTL and double-insulating symbols.
- Verify Category Rating.
- Visually inspect the leads for damaged insulation, and the case for cracks and damage.
- Check display for proper operation.

DON'T!

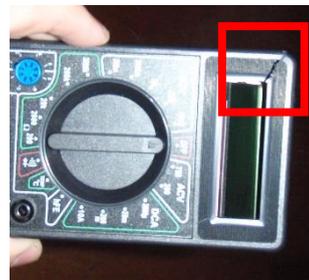
- Use meters that are not NRTL-listed, CAT-rated, and on the pre-approved list in ESM Appendix E.
- Use meters or meter leads that are bent, burned or otherwise damaged, or have faded or failed displays.

Visually inspect test instruments, and their associated accessories for external defects and damage before each use.

1 Verify your meter and leads have one or more NRTL symbols to ensure that you are using a listed product.



2 Look for the double-insulation symbol



5 Inspect the case for cracks and damage.

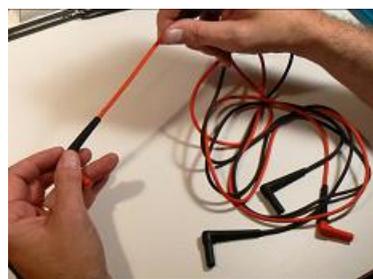


6 Turn the meter on and confirm proper operation of the display.

Confirm that your meter and the associated leads are CAT-rated.



3 Both the meter and the leads should be NRTL-listed, double-insulated and CAT-rated.



Inspect the leads by running your fingers down the leads as you visually inspect the condition. Look/feel for bent or burnt probes, wire poking through, etc.



4

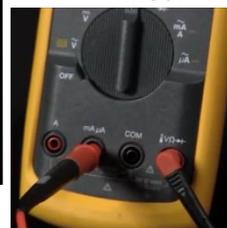
Function Test

In addition to the visual inspection, functional tests should be performed on your meter.

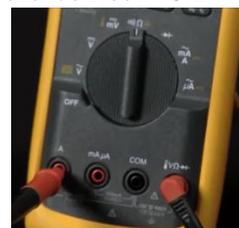


7 Set meter to Ω . Cross meter leads. Good leads will read in 0.1-0.5 ohm range. Bad leads will read OL. Jiggle the leads and watch the reading for loose connections or internal wire damage.

8 Check fuse condition. Set meter to Ω . Plug lead into the V port and insert in the A port. Reading should be near 0. If you have a mA port, insert the lead. Reading should be near 10k.



An OL reading in either case indicates a blown fuse.



Your life is in your hands! Inspect before each use!

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Is NOT a recognized NRTL!

