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## WT25 WRISTAT TESTER



The LEGGE Model **WT25** WRISTAT Tester is designed to test the integrity of our WRISTAT in a fast, efficient and simple manner. All of the elements of the WRISTAT - continuity of the strap, integrity of the protective resistor, and satisfactory strap to skin contact - are easily confirmed by pressing the top cover of the **WT25**. The operator (wearer) is tested for a resistance to ground of greater than 750K ohms and less than 10M or 100M ohms (switchable). The upper limit notifies you of an unacceptably high resistance value (IE possible loss of effective dissipation) and the lower limit warns of unsafe low resistance (possible risk of electric shock from surrounding motors, live wires etc).

### OPERATING INSTRUCTIONS

The **WT25** should be located on or near a work station. Installation of the **WT25** consists of connecting the post on the back of the unit to ground using the wire provided and selecting the desired range for the upper limit. The upper limit should be selected based on the ESD sensitivity of the components being handled by the operator. The **WT25** case must be isolated from ground, with only the rubber feet touching the work surface. Operators should test their WRISTAT several times a day.

Note: The user with the wrist strap placed on the wrist must attach the wrist strap ground cord to ground prior to testing with the WT 25. The wearer must be isolated from other ground sources in order to test the wearer and strap resistance. Standing on a conductive surface with conductive shoes or grounding devices may pass the wearer even though the wrist strap is not providing the path to ground.

To operate the **WT25** simply press the top cover of the unit while the WRISTAT is being worn and cord attached to ground. A tone and a green light indicates that the WRISTAT System (wearer, strap, and ground connection) is effectively dissipating static charges. The tone will only sound in conjunction with the green (safe) light. An amber light indicates a high resistance value (greater than the upper limit value of 10 or 100 MEGS), corresponding to unsatisfactory conditions to dissipate static charges within desired time limits. A red light indicates a resistance value less than 750K ohms, corresponding to unsafe operating conditions for the user. The **WT25** may be used to test the WRISTAT only. This test is performed by pressing the operator end (strap) to the top plate of the unit while the ground end of the strap is connected to the post on the back of the unit. The lights and the tone indicate the same information for the resistance of the WRISTAT as those for the WRISTAT System above.

# TROUBLE SHOOTING

Most problems with the WT25 can be traced to a weak/dead battery or improper ground connections. While depressing the lid, if the light levels are low, there is no tone when the green light is on, or there are no lights or tone, the 9V battery should be replaced. To replace the battery, remove the four screws on the sides of the unit and lift the top off. Replace the battery and reassemble the unit, making sure the top still pivots on the screws.

If test results appear to be wrong, check that the unit and the WRISTAT are grounded properly. They should be attached to a common ground. The unit's ground wire and the WRISTAT's ground should be tested separately for continuity and specified resistance. If these items are correct and improper readings are still occurring, check the unit for calibration.

## SPECIFICATIONS

Parts included:	1 WT25 1 8 FT Ground wire with alligator clip)
Resistance Tolerances:	
Lower Limit	750K ohms +or- 10%
Upper Limits	10 MEG ohm +or- 15% (switch set to 10M) 100 MEG ohm +or- 20% (switch set to 100M)
Battery:	9 Volts DC
Battery Life:	3 years typical for ten tests/day
Test Voltage:	7.6 Volts nominal

## CALIBRATION

The calibration of the WT25 should be checked every two years or if a problem occurs. The calibration is verified by testing known resistance values at each of the three possible limits. The resistors used should be within the tolerances listed. Perform the test by connecting one end of the resistor to the post on the back of the unit and the other end to the top of the unit. Simultaneously press the lid to activate the unit. The following resistance values should be used, giving the results indicated:

To Test:	Use Resistor of:	Results
Lower Limit (750K Ohms)	500K Ohms	Red Light, no tone
Upper Limit (10MEG)	Between 750K and 10MEG Above 10MEG	Green Light, tone Amber Light, no tone
Upper Limit (100Meg)	Between 750K and 100MEG Above 100MEG	Green Light, tone Amber Light, no tone

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