# Wrist Strap Tester Installation, Operation and Maintenance







Figure 1. Desco 19240 Wrist Strap Tester

# **Description**

Per ANSI/ESD S20.20, test equipment is required to enact the Compliance Verification Plan Requirement. Test equipment shall be selected to make measurements of appropriate properties of the technical requirements that are incorporated into the ESD program plan. The Wrist Strap Tester can be used to fulfill ANSI/ESD S1.1, "The wrist strap system should be tested daily to ensure proper electrical value" (Annex A3). Being a portable battery powered tool, it is perfect for small labs or for a supervisor to spotcheck workers and/or ensure compliance.

The Wrist Strap Tester is a battery operated "on demand" wrist strap tester. When the wearer of a wrist strap plugs in their coil cord and touches the metallic surface of the Wrist Strap Tester, a path for current flow is completed from the wearer's skin, through the wrist strap. This action will cause the green "test good" LED to illuminate as long as the resistance of the circuit path is between 750 kilohms and 10 megohms.

# **Packaging**

- 1 Wrist Strap Tester
- 1 9V Alkaline Battery
- 1 Hook and Loop Fastener Strip
- 1 Certificate of Calibration

#### Installation

Open the Wrist Strap Tester's battery compartment and install the included 9V battery. Use the included hook and loop fastener strip to mount the tester to a wall or worksurface.

NOTE: The low battery indicator flashes briefly every time the unit is used. Replace the battery once the indicator becomes constant during testing.

# Operation

- 1. Fit the wristband snugly onto your wrist.
- 2. Snap the wrist cord to the wristband.
- 3. Plug the wrist cord into the Wrist Strap Tester.
- 4. Push and hold the test button until the test results are displayed.
- An audible alarm will sound if the test fails. Verify that your wrist strap is being worn correctly or needs to be replaced. If your test result fails high, try applying an approved dissipative hand lotion such as Menda Reztore™ ESD Hand Lotion to your wrist.

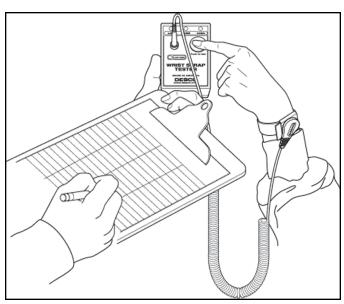


Figure 2. Using the Wrist Strap Tester and recording results

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#### Calibration

The Desco Wrist Strap Tester is calibrated to NIST traceable standards. There are no user adjustments necessary. We recommend that calibration be performed annually using the Desco 07010 Calibration Unit. It is a convenient product which allows the customer to perform NIST traceable calibration on single-wire personnel testers. The 07010 is designed to be used on the shop floor at the workstation. virtually eliminating downtime, verifying that the continuous monitor is operating within tolerances.

View technical bulletin TB-2039 for more information on the 07010 Calibration Unit and instructions to calibrate the Wrist Strap Tester.



Figure 3. Desco <u>07010</u> Calibration Unit

# **Specifications**

Test Voltage

Power Supply 9V Alkaline Battery

Operating Temperature 32°F - 104°F (0 - 40°C)

**Test Limits** 750 kilohms - 10 megohms

4 VDC

Test Accuracy ±20%

3.6" x 2.6" x 1.1" **Dimensions** 

Weight 4 oz

#### **Limited Warranty**

Desco expressly warrants that for a period of one (1) year from the date of purchase Desco Wrist Strap Testers will be free of defects in material (parts) and workmanship (labor). Within the warranty period, a credit for purchase of replacement Desco Wrist Strap Testers, or, at Desco's option, the Wrist Strap Tester will be repaired or replaced free of charge. If product credit is issued, the amount will be calculated by multiplying the unused portion of the expected one year life times the original unit purchase price. Call our Customer Service Department at 909-627-8178 (Chino, CA) or 781-821-8370 (Canton, MA) for a Return Material Authorization (RMA) and proper shipping instructions and address. Please include a copy of your original packing slip, invoice, or other proof of date of purchase. Any unit under warranty should be shipped prepaid to the Desco factory. Warranty replacements will take approximately two weeks.

If your unit is out of warranty, call our Customer Service Department at 909-627-8178 (Chino, CA) or 781-821-8370 (Canton, MA) for a Return Material Authorization (RMA) and proper shipping instructions and address. Desco will quote repair charges necessary to bring your unit up to factory standards.

#### **Warranty Exclusions**

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES. EXPRESSED AND IMPLIED. INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

### **Limit of Liability**

In no event will Desco or any seller be responsible or liable for any injury. loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.

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