

Tester Calibration Unit Operation, Installation and Maintenance





Figure 1. Vermason 222547 Tester Calibration Unit

Description

The Vermason 222547 Tester Calibration Unit is designed to simplify the process of calibrating Vermason personnel testers. This unit allows the user to quickly and easily verify whether a tester is operating within specifications. The Tester Calibration Unit is a passive device and requires no power source.

This device is intended to be used with the following items:

Item	Description		
<u>222504</u>	Compact Wrist Strap Tester		
<u>222506</u>	Compact Wrist Strap Test Station		
<u>222507</u>	Compact Wrist Strap / Footwear Test Station		
<u>222562</u>	High Speed, High Accuracy Wrist Strap Tester		
<u>222563</u>	High Speed, High Accuracy Wrist Strap Test Station		
<u>222564</u>	High Speed, High Accuracy Wrist Strap / Footwear Test Station		
<u>222565</u>	High Speed, High Accuracy Wrist Strap / Footwear Test Station with Output		

Packaging

- 1 Tester Calibration Unit
- 1 Stud-to-Stud Adapter
- 1 Certificate of Calibration

Operation

The Tester Calibration Unit was specifically designed for use in calibration of Vermason brand equipment. The following procedures will not cover adjustment of the test equipment. For detailed information regarding adjustment of specific Vermason brand testers, please contact <u>Desco Europe Customer Service</u>.

Frequency of recalibration should be based on the critical nature of those ESD sensitive items handled and the risk of failure for the ESD protective equipment and materials. In general, we recommend that calibration be performed annually.

Testing the Compact Tester

WRIST STRAP CIRCUIT

- 1. Connect the 10 mm lead from the Calibration Unit to the wrist strap stud on the Compact Tester.
- 2. Select 715K FAIL LOW on the Calibration Unit.
- 3. Press and hold the Calibration Unit's test probe on the Compact Tester's test plate. The tester should indicate a FAIL LOW condition.
- 4. Select 785K PASS LOW on the Calibration Unit and repeat the test. The tester should indicate a PASS condition.
- 5. Select 33M PASS HIGH on the Calibration Unit and repeat the test. The tester should indicate a PASS condition.
- Select 37M FAIL HIGH on the Calibration Unit and repeat the test. The tester should indicate a FAIL HIGH condition.

FOOTWEAR CIRCUIT

- 1. Connect the 10 mm lead from the Calibration Unit to the 10 mm footwear stud on the Compact Tester.
- 2. Select 715K FAIL LOW on the Calibration Unit.
- 3. Press and hold the Calibration Unit's test probe on the Compact Tester's test plate. The tester should indicate a FAIL LOW condition.
- 4. Select 785K PASS LOW on the Calibration Unit and repeat the test. The tester should indicate a PASS condition.
- 5. Select 33M PASS HIGH on the Calibration Unit and repeat the test. The tester should indicate a PASS condition.
- Select 37M FAIL HIGH on the Calibration Unit and repeat the test. The tester should indicate a FAIL HIGH condition.

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Testing the High Speed, High Accuracy Tester

WRIST STRAP CIRCUIT

- 1. Connect the 10 mm lead from the Calibration Unit to the 10 mm wrist strap stud on the High Speed, High Accuracy Tester.
- 2. Select 715K FAIL LOW on the Calibration Unit.
- Press and hold the Calibration Unit's test probe on the High Speed, High Accuracy Tester's test plate. The tester should indicate a FAIL LOW condition.
- 4. Select 785K PASS LOW on the Calibration Unit and repeat the test. The tester should indicate a PASS LOW condition.
- Select 9.5M LOW MID on the Calibration Unit and repeat the test. The tester should indicate a PASS LOW condition.
- 6. Select 10.5M HIGH MID on the Calibration Unit and repeat the test. The tester should indicate a PASS HIGH condition.
- 7. Select 33M PASS HIGH on the Calibration Unit and repeat the test. The tester should indicate a PASS HIGH condition.
- 8. Select 37M FAIL HIGH on the Calibration Unit and repeat the test. The tester should indicate a FAIL HIGH condition.

FOOTWEAR CIRCUIT

If applicable

- Connect the 10 mm lead from the Calibration Unit to the 10 mm socket on the footplate lead of the High Speed, High Accuracy Tester using the stud-to-stud adaptor.
- 2. Select 715K FAIL LOW on the Calibration Unit.
- Press and hold the Calibration Unit's test probe on the High Speed, High Accuracy Tester's test plate. The tester should indicate a FAIL LOW condition.
- 4. Select 785K PASS LOW on the Calibration Unit and repeat the test. The tester should indicate a PASS LOW condition.
- 5. Select 9.5M LOW MID on the Calibration Unit and repeat the test. The tester should indicate a PASS LOW condition.
- 6. Select 10.5M HIGH MID on the Calibration Unit and repeat the test. The tester should indicate a PASS HIGH condition.
- Select 33M PASS HIGH on the Calibration Unit and repeat the test. The tester should indicate a PASS HIGH condition.

8. Select 37M FAIL HIGH on the Calibration Unit and repeat the test. The tester should indicate a FAIL HIGH condition.

Specifications

Resistance Ranges*	Fail Low Pass Low Low Mid High Mid Pass High Fail High	715 kilohm 785 kilohm 9.5 megohm 10.5 megohm 33 megohm 37 megohm
Accuracy	±2 %	
Dimensions	96 mm x 61 mm x 40 mm	
Weight	0.1 kg	

*These resistance values may be verified using a digital voltmeter by setting it to read Ohms (Ω). Connect your voltmeter's test leads to each of the Calibration Unit's leads. If any value is out of specification, the Calibration Unit must be returned to the manufacturer for repair.

NOTE: The <u>222547</u> Tester Calibration Unit also calibrates the following discontinued Desco Europe items: 222543, 222544, 222545, 222546

Limited Warranty, Warranty Exclusions, Limit of Liability and RMA Request Instructions

See the Desco Europe Warranty -DescoEurope.com/Limited-Warranty.aspx

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