

Tester Calibration Unit Operation, Installation and Maintenance



Made in the
United Kingdom



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
222504	Compact Wrist Strap Tester
222506	Compact Wrist Strap Test Station
222507	Compact Wrist Strap / Footwear Test Station
222562	High Speed, High Accuracy Wrist Strap Tester
222563	High Speed, High Accuracy Wrist Strap Test Station
222564	High Speed, High Accuracy Wrist Strap / Footwear Test Station
222565	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, contact our Customer Service Department at 0044 (0) 1462 672005.

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 10mm lead from the Calibration Unit to the 10mm 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.
6. 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 10mm lead from the Calibration Unit to the 10mm 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.
6. Select 37M FAIL HIGH on the Calibration Unit and repeat the test. The tester should indicate a FAIL HIGH condition.

Testing the High Speed, High Accuracy Tester

WRIST STRAP CIRCUIT

1. Connect the 10mm lead from the Calibration Unit to the 10mm wrist strap stud on the High Speed, High Accuracy Tester.
2. Select 715K FAIL LOW on the Calibration Unit.
3. 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.
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

1. Connect the 10mm lead from the Calibration Unit to the 10mm 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.
3. 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.
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.

Specifications

Resistance Ranges:

Fail Low	715 kilohm
Pass Low	785 kilohm
Low Mid	9.5 megohm
High Mid	10.5 megohm
Pass High	33 megohm
Fail High	37 megohm

Accuracy:

±2%

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.

Dimensions:

96mm L x 61mm W x 40mm H

Weight:

0.1kg

NOTE: The [222547](#) Tester Calibration Unit also calibrates the following discontinued Vermason items:

222543, 222544, 222545, 222546

Limited Warranty

Vermason expressly warrants that for a period of one (1) year from the date of purchase, Vermason Tester Calibration Units will be free of defects in material (parts) and workmanship (labour). Within the warranty period, a unit will be tested, repaired or replaced at Vermason's option, free of charge. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and for proper shipping instructions and address. Any unit under warranty should be shipped prepaid to the Vermason factory. You should include a copy of your original packing slip, invoice, or other proof of purchase date. Warranty repairs will take approximately two weeks.

If your unit is out of warranty, Vermason will quote repair charges necessary to bring your unit to factory standards. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and proper shipping instructions and address.

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 Vermason 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.