

# Proving Unit Instruction Manual









# **BEFORE YOU START**

# GENERAL PRECAUTIONS



#### Read and understand this guide before operating this equipment.

The TMAC Proving Unit for Voltage Tester (TM00224) is to be only used by qualified personnel and must be used in conjunction with the user's own working and safety procedures, without compromising the integrity of the TMAC product supplied.

Follow all safety instructions contained within this guide.

#### **QUALIFIED PERSON**

A qualified person is one who is familiar with the installation, construction, operation or maintenance of the equipment and the hazards involved. In addition this person is competent, trained and authorized to undertake the work involved in accordance with established safety and working procedures.

# SAFETY SYMBOLS USED IN THE GUIDE



**Hazard Identification** - This is a general warning sign. It is used to alert the user to potential hazards. Any information that follows this symbol must be obeyed to avoid possible harm.

# **GENERAL INFORMATION**

### **DESCRIPTION**

The Proving Unit is a portable battery powered device with a high-quality single LED indicator for the testing of TMAC DT-9130 or similar digital multimeter. The unit is designed to test the correct operation of your multimeter prior to and after testing to ensure your meter has not developed a fault. The unit has a regulated output to provide a controlled voltage for testing. It is lightweight easy to use and has its own carry case with belt clip to be able to carry with you on the job.

#### SAFETY INFORMATION

This device has been designed with your safety in mind, but pay attention to the following warnings and cautions before use.

- Before use check the unit for cracks or any other damage
- Make sure the unit is free from dust, grease and moisture
- Do not use if damaged
- Do not use if the battery cover is not fitted
- Limit the test time to less than 10 seconds
- Do not short the output terminals
- Avoid severe mechanical shock, vibration and extreme temperature.





**Hazard Identification** – All relevant Australian statutory regulations must be adhered to when using this instrument.

Prior to using this device with the DT-9130 Voltage Tester or a digital multimeter, ensure that the test leads and the instrument are in good condition.

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# **BEFORE USE**

The Proving Unit must only be used within its environmental and electrical ratings. Always make sure the precautions and limitations of the unit being tested are observed. If necessary refer to the specification of the unit being tested. The operational safety of this device may be compromised if modifications are carried out by the user.



**Hazard Identification** – Avoid direct contact with the output terminals. Do not try to open the housing. Use only with insulated probes to ensure users safety as the unit can produce a shock when using uninsulated cables.

This device has a limited-current circuit segregated by insulated terminals.

# **OPERATION**

Before testing, lock the Connector TM00227 into the floating Test Probe. Insert the floating Test Probe into the black terminal. The Red LED should be a solid red light, if flashing slowly the battery needs replacement. Insert or touch the fixed Test Probe into the red terminal of the Proving Unit. When the Fixed Test Probe is connected, the LCD will read between 220 and 260 VAC, the LEDs [5 and 6 – Red] will light up and the Red LED on the Proving Unit will flash rapidly and the buzzer will sound.

Solidly Illuminated	The Proving Unit is operating correctly.	
Flashing Quickly	The Proving Unit is experiencing a short circuit on its' output terminals.	
	Disconnectimmediately.	
Flashing Slowly	The Proving Unit has a low battery	



#### BATTERY REPLACEMENT

Remove the rear battery cover by sliding the cover. The battery is captive under pressure with a tight fit. Dislodge the battery carefully without pulling the connecting cables and connect a new battery observing the correct polarity.

Replace the battery cover by sliding and locking it into the case.

# **ROUTINE MAINTENANCE & INSPECTIONS**

Inspect the device regularly, and test every 6-12 months. Remove the device from service immediately if:

- There is visible evidence that the device has been damaged
- The device has been stored under unfavourable conditions for a long period of time
- The device has been subjected to physical abuse during transport.

Remove the batteries when not in use for an extended period, to avoid corrosion from leaking batteries. The outside of the device should be cleaned with a soft, damp cloth or brush only. Do not use abrasive or chemical cleaning agents which could damage the housing or impair operation.

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#### **DISPOSAL OF BATTERIES**

The end user is required by law to dispose of all used batteries in a proper manner.

# TECHNICAL SPECIFICATIONS

Power Source:-9V Alkaline Battery	Output Voltage:- 240V AC (±5% @ 1MOhms Load	Operating Current:-<45mADC
Output Frequency: 100Hz Modified Sine Wave (±5%)	Operating Temperature:10°C to +50°C Ambient	Humidity:-5% - 95% RH

# **REPAIR**

The end user must not repair or modify any component associated with this device without written permission from TMAC. If repair is required, contact TMAC.

#### **TMAC**

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# **DEFECTS / WARRANTY**

#### **DEFECTS**

Goods are warranted to be free from defects. Provided they have been used strictly as recommended and subjected only to fair wear and tear, Goods (including parts within) which are found to be defective within 90 days after delivery to the Buyer will be repaired or replaced at the option of the Seller and at its expense. Repair or replacement by the Seller is the exclusive remedies of the Buyer.

#### WARRANTY

To the maximum extent permitted by law, the Seller makes no warranties, either express or implied, as to merchantability, fitness for purpose or otherwise with respect to the Goods other than in paragraph above and as required by statute. The Seller is not liable for any prospective profits or special, indirect or consequential damages or any general loss or damage, or for any expense resulting from use by the Buyer or others of defective Goods. The Seller's liability is limited to no more than the sale price of the Goods plus replacement delivery charges. Prior authority for the return of goods is required by the seller. Please contact the seller by email sales@tmacgroup.com.au, phone 07 3826 6000 or fax 07 3826 6066 for claims related to defective / warranty of goods provided.

FOR THE FULL TERMS AND CONDITIONS PLEASE REFER TO TMAC "STANDARD TERMS OF TRADE"

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