

EN

Original Instructions
Version 1

DRAPER[®]

AC/DC

VOLTAGE TESTER

51957



UK
CA CE

1. Preface

These are the original product instructions. This document is part of the product; retain it for the life of the product, passing it on to subsequent holders. Read this manual in full before attempting to assemble, operate, or maintain this product.

This Draper Tools manual describes the purpose of the product and contains all the necessary information to ensure its correct and safe use. Following all the instructions and guidance in this manual will ensure the safety of both the product and the operator and increase the lifespan of the product.

All photographs and drawings within this manual are supplied by Draper Tools to help illustrate correct operation of the product.

Every effort has been made to ensure the information contained in this manual is accurate. However, Draper Tools reserves the right to amend this document without prior warning. Always use the latest version of the product manual.

1.1 Product Reference

User Manual for: AC/DC Voltage Tester

Stock No: 51957

Part No: VT2

1.2 Revisions

Version 1: June 2022

First release

As our manuals are continually updated, always ensure that the latest version is used.

Download the latest version from:
drapertools.com/manuals

1.3 Understanding the Safety Content

WARNING! – Situations or actions that may result in personal injury or death.

CAUTION! – Situations or actions that may result in damage to the product or surroundings.

Important: – Information or instructions of particular importance.

1.4 Copyright © Notice

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In all cases, this copyright notice must remain intact.

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3. Warranty

Draper Tools products are carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, return the complete tool to your nearest distributor or contact Draper Tools directly. Contact information can be found at the back of this manual.

Proof of purchase must be provided.

If, upon inspection, it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty covers parts and labour for the lifetime of the product. However, if the tools are hired out, the warranty period is 90 days from the date of purchase.

This warranty does not apply to any consumable parts, batteries or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper Tools repair agent.

In all cases, to make a claim for faulty workmanship or materials within the standard warranty period, please contact or return the product to the place of purchase. Proof of purchase may be required.

If the place of purchase is no longer trading or if you experience any difficulties with your warranty, please contact Customer Services with the product details and your proof of purchase. Contact details can be found at the back of this manual.

If the tool is not covered by the terms of this warranty, repairs and carriage charges will be quoted and charged accordingly.

This warranty supersedes any other guarantees expressed or implied and variations of its terms are not authorised.

Your Draper Tools guarantee is not effective until you can produce, upon request, a dated receipt or invoice to verify your purchase within the guarantee period.

Please note that this warranty is an additional benefit and does not affect your statutory rights.

Draper Tools Limited

4.1 Scope

This product is designed for checking circuits to determine whether they are live and the type of current flowing within them. It is suitable for use on domestic wiring, automotive circuitry and other electronic equipment. Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Part of our Expert range, this product is intended for frequent trade use, with the quality and features to meet and exceed expectations of the most demanding user.

WARNING! This product is not a toy and must be respected.

Read this manual in full before attempting to assemble, operate or maintain the product, and retain it for later use.

4.2 Specification

Stock No.	51957
Part No.	VT2
Alternating voltage:	12–600V
Direct voltage:	12–600V
Frequency range:	50–60Hz
Duty cycle:	60 seconds per 120 seconds
Max. probe length:	15mm (approx.)
Operating temperature:	-10°C to +55°C
Appliance class:	Class III 600V
IP rating:	IP66

5. Health and Safety Information

Important: Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Non-compliance with these instructions may result in user injury or damage to the product.

5.1 General Health and Safety Precautions

Important: This is **NOT** a measuring device, and the LED indicators cannot be used to measure the strength of the current.

- This product should only be used by suitably qualified personnel and in the manner outlined in this manual.
- Observe all standard safety precautions and good practices when working with electrical equipment and live circuitry.

- Before every use, inspect the product and probes for broken, cracked, loose or corroded parts.

Important: DO NOT use this product if it is damaged in any way. Contact Draper Tools to discuss repair and replacement options.

- Keep your fingers behind the guards at all times during testing.
 - **NEVER** touch the metal probes during testing.
- **DO NOT** hold the device in any way that obscures the indicators during use.
- **DO NOT** disassemble or modify this product.
- Before use on untested circuits, test the device on a known and stable power source to verify correct functionality.
- **ALWAYS** observe the maximum duty cycle:
 - The voltage tester must not be used for more than 60 seconds at a time.
 - The tester must be rested for at least 60 seconds after every 60 seconds of use.
- **DO NOT** use this device in wet environments or expose it to water or other liquids.
- Switch off and disconnect the power to the circuit before butting, unsoldering or breaking the circuit.
 - Exercise caution when working with circuits exceeding 60V DC or 30V AC as these voltages pose a shock risk.
- This is a Class III appliance.

WARNING! NEVER exceed the rated capacities of this product. Testing circuits beyond the nominal voltage range marked on the device may cause an electric shock.

- **NEVER** ground yourself when taking electrical measurements.
 - **DO NOT** touch exposed metal pipes, outlets and fixtures, etc., which may increase the risk of grounding.
 - Keep your clothing dry and use approved insulating materials, including rubber shoes and mats.
 - **NEVER** use this product with wet hands.

5.2 Safety Advices

Depending on the internal impedance of the voltage detector, there will be a different capability of indicating the presence or absence of operating voltage in case of the presence of interference voltage.

A voltage detector of relatively low internal impedance, compared to the reference value of 100 k Ω , will not indicate all interference voltages having an original voltage value above the ELV level. When in contact with the parts to be tested, the voltage detector may discharge temporarily the interference voltage to a level below the ELV, but it will be back to the original value when the voltage detector is removed.

When the indication “voltage present” does not appear, it is highly recommended installing earthing equipment before work.

A voltage detector of relatively high internal impedance, compared to the reference value of 100 k Ω , may not permit to clearly indicate the absence of operating voltage in case of presence of interference voltage.

When the indication “voltage present” appears on a part that is expected to be disconnected of the installation, it is highly recommended confirming by another means (e.g. use of an adequate voltage detector, visual check of the disconnecting point of the electric circuit, etc.) that there is no operating voltage on the part to be tested and to conclude that the voltage indicated by the voltage detector is an interference voltage.

A voltage detector declaring two values of internal impedance has passed a performance test of managing interference voltages and is (within technical limits) able to distinguish operating voltage from interference voltage and has a means to directly or indirectly indicate which type of voltage is present.

6.1 Product Overview



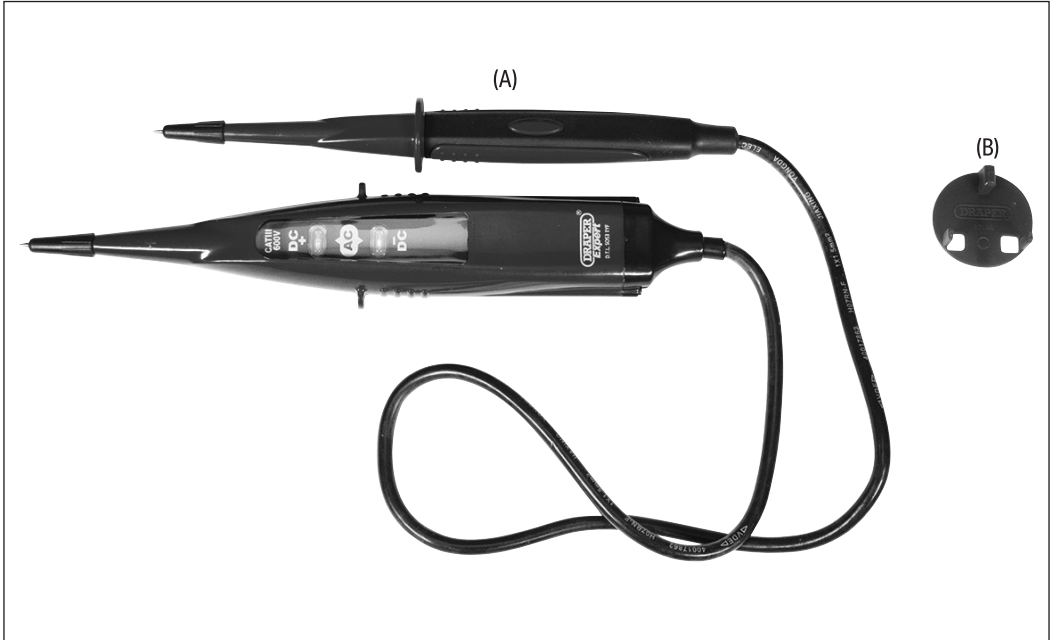
- (1) L1 probe –
- (2) L2 probe +
- (3) Probe caps
- (4) Positive voltage indicator (red)
- (5) Negative voltage indicator (green)
- (6) Guards
- (7) Storage union clip
- (8) Storage union slot

6. Identification and Unpacking

6.2 What's in The Box?

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment.

Before assembling the product, lay the contents out and check them against the parts shown below. If any part is damaged or missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.



(A) 1 x Two-probe AC/DC voltage tester

(B) 1 x Socket gate

6.3 Packaging

Keep the product packaging for the duration of the warranty period in case the product needs to be returned for repair.

WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit drapertools.com for our full range of accessories and consumables.

7. Operating Instructions

Important: Before using this product, read and understand all the safety instructions listed in this manual.

1. Keeping your hands and fingers behind the guards (6), touch the L1 negative probe (1) to the negative or neutral contact or circuit path.

Important: When testing BS 1363 three-pin sockets, this is the bottom left contact.

2. Touch the L2 positive probe (2) to the positive contact or circuit path.

Important: When testing BS 1363 three-pin sockets, this is the bottom right contact.

3. The LED indicators will illuminate if a current is detected:

- **Red positive voltage indicator (4) only:** A positive DC current is present in the circuit
- **Green negative voltage indicator (5) only:** A negative DC current is present in the circuit
- **Both indicators simultaneously:** An AC current is present in the circuit
- **Neither indicator:** The current is too small or is not present in the circuit

Notes on Use

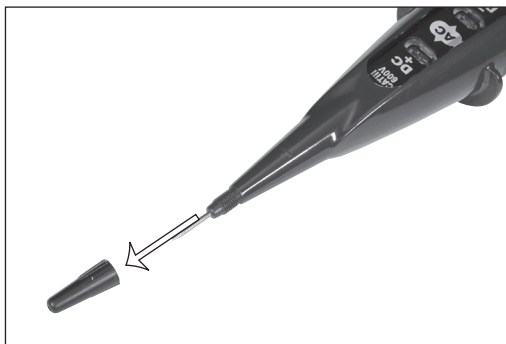


Fig. 1

If necessary, the probe caps (3) can be removed to extend the length of the exposed probes. To remove the probe caps, twist them anticlockwise (Fig. 1).

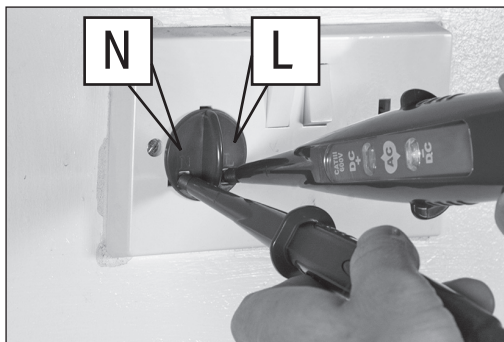


Fig. 2

When testing three-pin plug sockets with shielded contacts, insert the socket gate (B) into the socket to open the guards and insert the probes through the appropriate openings (Fig. 2).

- **N (Neutral):** Insert the L1 negative probe (1)
- **L (Load):** Insert the L2 positive probe (2)

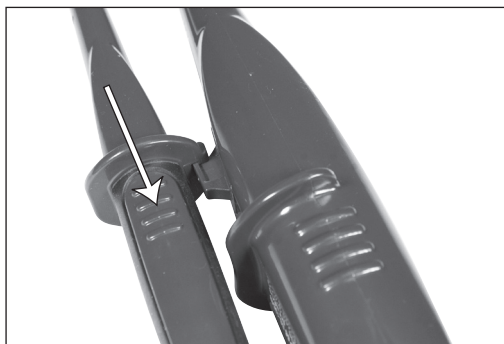


Fig. 3

When not in use, the two probe housings can be attached together by sliding the storage union clip (7) through the storage union slot (8) (Fig. 3).

8. Maintenance and Storage

Important: Beyond basic cleaning and care, this product contains no user-serviceable parts. Repairs and servicing should only be attempted by approved and qualified Draper Tools agents.

- Keep the device clean and dry.
- Clean the product using a soft dry cloth **ONLY**.
 - **NEVER** use abrasive materials or aggressive chemicals as these may damage the plastic or insulated parts of the device.
 - **NEVER** use substances that may cause the probes to corrode.
- Do not expose the product to direct sunlight for prolonged periods.
- To protect the probes, ensure that the probe caps (3) are fitted before storing for prolonged periods.
- Store the product in a clean, cool and dry location, out of reach of children.



For servicing, repair and replacement options, please contact the Draper Tools Product Helpline for details of your nearest authorised agent. Any servicing or repairs carried out by unauthorised personnel will invalidate your warranty.

At the end of its working life, dispose of the product responsibly and in line with local regulations. Recycle where possible.

- **DO NOT** dispose of this product with domestic waste; most local authorities provide appropriate recycling facilities.
- **DO NOT** burn or mutilate electrical equipment; this may release toxic or corrosive substances.

10. Explanation of Symbols



Read the instruction manual



Warning!



Suitable for use with AC and DC circuits



Do not incinerate or throw onto fire



Rated voltage range



Probe length



Cable length



LED indicators



WEEE –

Waste Electrical & Electronic Equipment

Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish



UK Conformity Assessed



European conformity

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