EN

Original Instructions
Version 3 – September 2023

DRAPER®

BATTERY, BULB, FUSE & CONTINUITY TESTER

90478

UK CA CE

Read this manual in full before using this product and retain it for future use. Always use the latest version of the manual. Please visit **drapertools.com/manuals** for the latest version.

1. Intended Use

This multipurpose tester may be used to indicate the power levels of dry cell 1.5V batteries (AAA, AA, C, D and button type), 9V batteries (PP3 and 6LR61), and to test household and automotive fuses, domestic filament bulbs with bayonet fitting, and push/screw-type torch light bulbs for continuity. Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

2. Specification

Stock No.	90478
Part No.	BBFC2

3. Health and Safety Information

Important: Read all the Health and Safety instructions before attempting to use this product. Non-compliance may result in serious injury or death.

- Use this product **ONLY** as instructed in this manual.
- **DO NOT** attempt to open, dismantle or modify this product in any way.
- Use **ONLY** accessories and spare parts supplied by Draper Tools.
  - **DO NOT** use any other leads with this product than those supplied. Contact Draper Tools for replacement options if the leads become damaged.
- Observe all standard precautions and good practice when working with live electrical components and currents.
- Before every use, inspect the device for missing, broken, loose or corroded parts and battery leakage.
  - **DO NOT** use this product if it is damaged in any way; contact Draper Tools to discuss repair and replacement options.
  - If battery acid comes into contact with your skin, wash it off immediately with plenty of clean water.

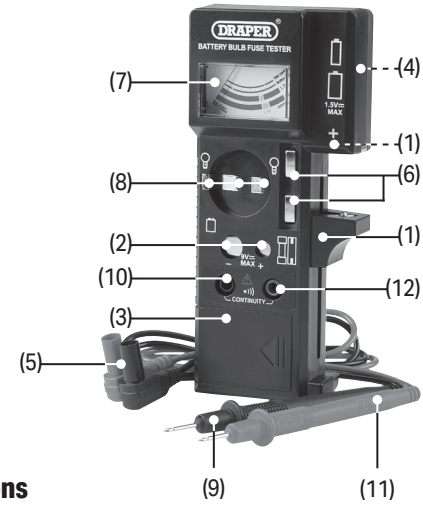
  - If battery acid comes into contact with your eyes, flush them with plenty of clean water and seek immediate medical attention.
- Ensure that the device is clean, dry and free from grease before use.
- **DO NOT** use this product if it exhibits abnormal behaviour and have it checked by a qualified and authorised technician before next use.
- **DO NOT** exceed the maximum rated capacity per function for this device as it may expose you to a shock hazard.
- **DO NOT** expose this product to excessive ambient temperature, high humidity, flammable substances or environments that produce a strong magnetic field.
- **DO NOT** use this this product around explosive gases, vapours or dust.
- **DO NOT** immerse this device in water or expose it to wet conditions.
- **ALWAYS** wear protective insulated gloves while using this product.
- Keep your fingers behind the guards at all times when using the probes.
- **ALWAYS** remove the contact cables from the device before accessing the battery compartment.
- **DO NOT** operate this device with the battery compartment open or missing.
- **NEVER** insert the probe contacts into the device terminals.
- **DO NOT** apply any voltage to the probes.
- **DO NOT** short any of the tester terminals.
- **NEVER** test batteries that show evidence of leakage.
- **ALWAYS** ensure that batteries are tested using the correct polarity.
- **NEVER** test items using contacts that were not designed for that item.
- **DO NOT** abuse, mutilate or burn the battery.
- Remove the batteries when the product is stored for extended periods.
- Keep this product out of reach of children.

Important: When performing a continuity test, disconnect the power and allow all capacitors to discharge before measurement.

WARNING! NEVER measure resistance across a voltage source or on a powered circuit.

4. Identification

(1) 1.5V battery test contacts
(2) 9V battery test contacts
(3) Fuse storage
(4) Battery compartment
(5) Continuity test probes
(6) Fuse test contacts
(7) Gauge
(8) Lightbulb test contacts
(9) Negative (black) probe
(10) Negative probe terminal
(11) Positive (red) probe
(12) Positive probe terminal



5. Operating Instructions

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

5.1 Installing the Battery

Slide the battery cover away from the battery compartment (4) on the rear of the device and connect a 9V PP3 or equivalent battery to the contacts according to the correct polarity. Insert the battery into the compartment and reinstall the cover.

Important: DO NOT operate this device without the battery compartment cover in place.

5.2 Testing 1.5V Batteries (AAA, AA, C, D etc.)

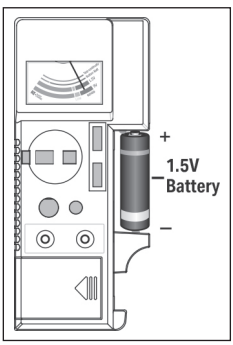


Fig. 1

1. Position the lower 1.5V battery test contact (1) as appropriate and insert the battery according to the marked polarity (Fig. 1).
2. To read the battery level, observe the position of the gauge (7) needle against the scale band marked “1.5V”.
   - **Green:** The battery level is good.
   - **Yellow:** The battery level is low.
   - **Red:** The battery level is very low and the battery cannot be used.

5.3 Testing 9V Batteries (6F22, 006P, etc.)

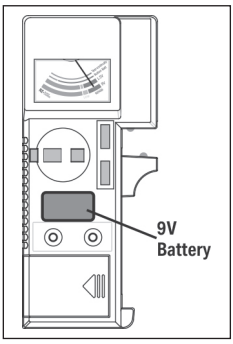


Fig. 2

1. Connect the battery to the 9V battery test contacts (2) according to the marked polarity (Fig. 2).
2. To read the battery level, observe the position of the gauge (7) needle against the scale band marked “9V”.
   - **Green:** The battery level is good.
   - **Yellow:** The battery level is low.
   - **Red:** The battery level is very low and the battery cannot be used.

5.4 Testing Fuses

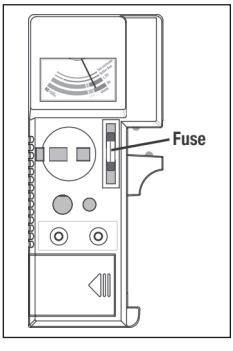


Fig. 3

1. Place the fuse against the fuse test contacts (6) (Fig. 3).
2. To read the state of the fuse, observe the position of the gauge (7) needle against the scale band marked “Test continuity”.
   - **Green:** The fuse may be used in an appropriate appliance.
   - **Red:** The fuse is in an open circuit state.

5.5 Testing Bulbs

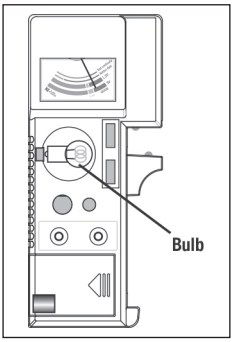


Fig. 4

1. Place the two bulb terminals against two of the three lightbulb test contacts (8), depending on the type of bulb (Fig. 4).
2. To read the state of the bulb, observe the position of the gauge (7) needle against the scale band marked “Test continuity”.
   - **Green:** The bulb may be used in an appropriate appliance.
   - **Red:** The bulb is damaged and cannot be used.

5.6 Continuity Testing

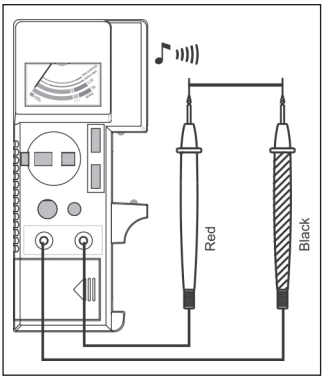


Fig. 5

1. Insert the probe connectors into the terminals on the device:
   - The negative (black) probe (9) connects to the **left** (negative) terminal (10).
   - The positive (red) probe (11) connects to the **right** (positive) terminal (12).
2. Disconnect all power to the circuit to be tested and discharge all capacitors.

WARNING! NEVER measure resistance across a voltage source or on a powered circuit.

3. Connect the probes across the circuit to be tested, observing the correct polarity.
4. An audible alarm will sound if the circuit resistance is <5,000Ω.
   Important: If the resistance is between 5,000–10,000Ω, the alarm may or may not sound.

6. Product Care, Storage and Disposal

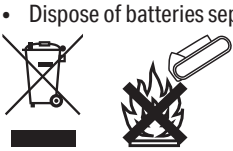
- Keep the product clean and free from dust, debris and grease.
- Use a dry cloth **ONLY** to clean the housing of this device.

CAUTION! DO NOT use abrasives, solvents or other aggressive chemicals as these may damage plastic or insulated parts.

- Replace the probes **IMMEDIATELY** if they are damaged in any way or the conductors are exposed; contact Draper Tools for replacement options.
- Remove the battery when storing the device for extended periods; it can be stored in the battery storage compartment (4).
- Store the device in a cool, clean and dry environment, out of direct sunlight and out of reach of children.

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. [add WEEE symbol]
- **DO NOT** burn or mutilate batteries; this may release toxic or corrosive substances. [add fire symbol]
- Dispose of batteries separately and in accordance with local regulations.



7. Warranty

Should the tool develop a fault, return the complete tool to your nearest distributor or contact Draper Tools directly. 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 12 months from the date of purchase. 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.

Visit **drapertools.com/warranty** for full details.

8. Explanation of Symbols

WEEE – Waste Electrical & Electronic Equipment

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

Read the instruction manual

Suitable for testing 1.5V and 9V batteries

Warning!

This product emits noise

UK Conformity Assessed

European conformity

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