12V DIGITAL BATTERY & ALTERNATOR/ STARTER TESTER WITH PRINTER

MODEL NO: **BT2012.V3**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.

Refer to instructions | Wear eye protection | Wear protective clothing | Wear protective gloves | Warning | Warning corrosive substance

1. SAFETY

1.1. **PERSONAL PRECAUTIONS**

- ✓ Ensure that there is another person within hearing range and close enough to come to your aid, should a problem arise when working near a lead-acid battery.
- ✓ Wear safety eye protection and protective clothing. Avoid touching eyes while working near battery.
- ✓ Have fresh water nearby in case battery acid contacts skin, clothing, or eyes.
- ✓ Rinse immediately with water if battery acid contacts skin or clothing. If acid enters eye, flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.
- ✓ Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current which is high enough to weld such items to the vehicle and cause severe burns.
- ✓ Ensure that hands, clothing (especially belts) are clear of fan blades and other moving or hot parts of engine. Remove ties and contain long hair.
- × **DO NOT** smoke or allow a spark or flame in the vicinity of the battery or engine.

1.2. **GENERAL SAFETY INSTRUCTIONS**

- ✓ Familiarise yourself with the application, limitations and potential hazards of the tester. Also refer to the vehicle manufacturer's hand book.
  IF IN ANY DOUBT CONSULT A QUALIFIED ELECTRICIAN.
- ✓ Ensure that the tester is in good condition before use. If in any doubt **DO NOT** use the unit and contact a qualified electrician.
- ✓ Only use recommended attachments and parts. To use unapproved items may be dangerous and will invalidate your warranty.
- ✓ Keep tools and other items away from the engine and ensure that you can see the battery and working parts of the engine clearly.
- ✓ Determine the system voltage before using the tester.
- ✓ If the tester receives a sharp knock or blow the unit must be checked by a qualified service agent before using.
- ✓ If the battery terminals are corroded or dirty: clean them before using the tester.
- ✓ Keep children and unauthorised persons away from the work area.
- × **DO NOT** dismantle the tester for any reason. The tester must only be checked by qualified service personnel.
- ❑ **WARNING!** To prevent the risk of sparking, short circuit and possible explosion **DO NOT** drop metal tools in the battery area, or allow them to touch the battery terminals.
- × **DO NOT** cross-connect tester to battery. Ensure positive (RED) clamp is to positive terminal and negative (BLACK) clamp is to negative terminal. If battery symbols cannot be distinguished: the negative terminal is the one directly connected to the vehicle bodywork.
- × **DO NOT** use the tester outdoors, or in damp, or wet locations and **DO NOT** use in the vicinity of flammable liquids or gases.
- × Ensure there is effective ventilation to prevent a build-up of explosive gases.
- × **DO NOT** use the tester for a task for which it is not designed.
- ✓ When not in use, store the tester carefully in a safe, dry, childproof location.

2. INTRODUCTION

Offers a full diagnosis of the vehicle battery, starter motor and alternator in seconds. The tester will work on batteries with as little as 1.5V of residual charge. Supports 12V batteries including standard Lead-Acid, VRLA, GEL plus AGM and EFB found on all Start/Stop vehicles. Large LCD shows charging and starting system status and returns decision-making information in seconds, with the facility to print the results. Fitted with a heavy-duty rubber cover for better grip.

3. SPECIFICATION

Model No:..... BT2012.V3
Battery: ..... 1 x 9V (not included)
Charging System Capability:.....12V
Consumable .....Parts:.... BT2012.V2-01
- Printing Roll for BT2012.V2 Pack of 2
Minimum Power Requirement:.....1.5V
Note: .....*CCA - Cold Cranking Amps
Rated Battery Voltage: 12V
Rating Systems:..... DIN, EN, IEC, SAE
Voltage Range: 1.5-17V

Test Ranges Table:
50-1400 CCA*, 50-800 CCA* DIN, 50-1400 CCA* EN, 50-800 CCA* IEC, 50-1400 CCA* SAE, By Battery Type JIS

4. OPERATION

❑ **WARNING!** Ensure that you read, understand and apply the safety and operational instructions before applying the tester clamps to the battery. Only when you are sure that you understand the procedures is it safe to proceed with the testing process.

4.1. PREPARATION

❑ **WARNING!** Ensure that the vehicle, or battery, is in a well ventilated area before starting to test.

4.1.1. Check battery casing for cracks or leakage. If damage is found **DO NOT** test and replace battery.

4.1.2. Clean battery terminals.

4.1.3. If possible, check electrolyte levels and top-up with distilled water as necessary.

4.1.4. When testing on the vehicle, unless otherwise specified, tests are carried out with all electrical items switched off. Leaving any items on (boot light, interior light, etc.) can result in expensive mis-diagnosis. If the vehicle was running prior to testing, turn on the headlights for 30 seconds to remove surface charge. Switch off the lights, let the battery recover for 60 seconds before testing.

4.1.5. Confirm that the 4 x 1.5V battery (not supplied) is fitted correctly in the compartment in the rear of the tester (fig.1). The batteries power the printer and enables storage of test data after test and disconnection. **DO NOT** operate the printer without the print paper loaded and ready for printing.

4.2. CONNECTING TO BATTERY

4.2.1. Connect the positive (red) clip to the positive (+) terminal of the battery. Ensure a good connection to the terminal.

4.2.2. Connect the negative (black) clip to the negative (-) battery terminal, again ensuring a good connection.

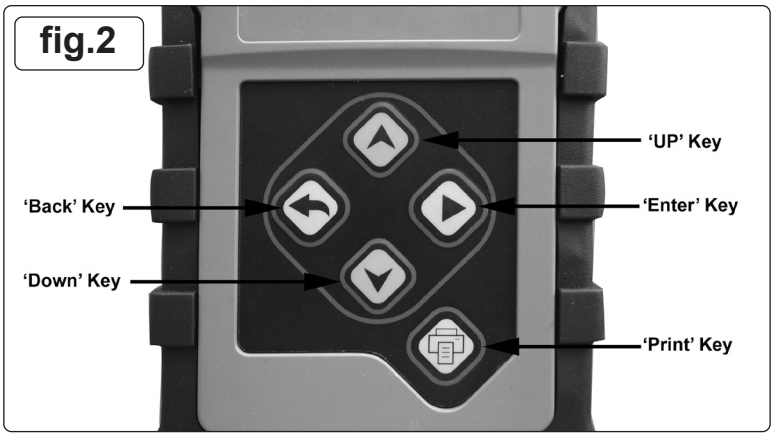
4.3. DISPLAY

4.3.1. The initial screen display shows: (fig.3)

4.3.2. Which includes the battery voltage.

fig.1

fig.2



4.4. BATTERY TEST

4.4.1. Pressing 'ENTER' shows: (fig.4) with 'TEST BATTERY' flashing.

4.4.2. Press 'ENTER' to select the battery test function.

4.4.3. The display will show input selection view: (fig.5)
Enter the input standard by means of the 'DOWN' or 'UP' key (fig.2) and pressing 'Enter' on the appropriate standard. The input standard should be shown on the battery specification label, after the amperage.

4.4.4. When the input standard is selected the amperage screen is displayed: (fig.6)

4.4.5. The required amperage (from the battery label) should be entered using 'UP' or 'DOWN' key, pressing the 'ENTER' key to set.

4.4.6. The battery state will be displayed showing:
Battery Condition
Voltage
Resistance
Cold Cranking Amps
Percentage of Cold Cranking Amps

4.4.7. Press the 'BACK' key (fig.2) to return to the main menu when the test is complete.

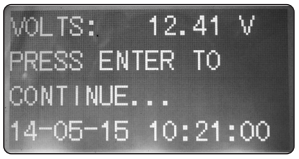


fig.3

fig.4

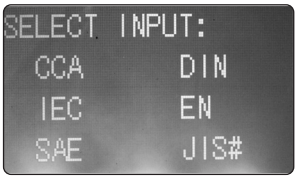


fig.5

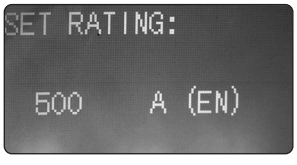


fig.6

4.5. STARTING SYSTEM TEST

4.5.1. From the screen shown at 4.4.1., select 'TEST STARTER'.

4.5.2. Start the vehicle.

4.5.3. The starter test results appear automatically on the display.

4.5.4. Press the 'BACK' key (fig.2) to return to the main menu when the test is complete.

4.6. CHARGING SYSTEM TEST

4.6.1. From the screen shown at 4.4.1., select 'TEST ALTERNATOR'.

4.6.2. The display will show: (fig.7)

4.6.3. Pressing the 'ENTER' key (fig.2) will display the test result.

fig.7

4.7. OTHER FUNCTIONS

4.7.1. Scrolling down from 4.4.1. will show: (fig.8)

4.8. VIEW TEST RESULT

4.8.1. Press 'VIEW TEST RESULT' to review the test.
Press 'ENTER' to scroll from battery test to starting system to charging system.

fig.8

4.9. SET DATE & TIME

4.9.1. Press 'SET DATA & TIME' key.

4.9.2. Press 'UP' or 'DOWN' key to add or subtract from the setting.

4.9.3. Press 'ENTER' to scroll right; entering yy-mm-dd.

4.9.4. When complete, press 'ENTER' for 2 seconds to store the set values.

NOTE: There may be a small block of pixels appear on the screen when you are setting the date and time. This is normal for this device and can be corrected by scrolling down through the time or date settings until the mark disappears.This mark does not affect the functionality of the device in any way.

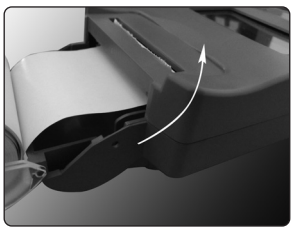


fig.9

4.10. PRINTER

× **DO NOT** operate the printer without first loading the paper strip under the print head (fig.9)

4.10.1. To thread the print roll: connect the tester to a vehicle battery, thread the cleanly cut beginning of the roll under the print head until resistance is felt and press the 'PRINT' key (fig.2) to feed through.

4.10.2. At the end of a test procedure, pressing 'PRINT' will print the last set of results.

4.10.3. Alternatively, selecting 'VIEW TEST RESULT' (section 4.8.) and then pressing 'PRINT' will print the entire test cycle.

5. TROUBLESHOOTING

5.1. In the event of a poor connection, or a battery voltage in excess of 18V, the display will revert to the main menu.

5.2. The printer will not function if the vehicle battery has a charge of less than 10V.

5.3. If the display shows 'CHECK PRINT PAPER', replace printer paper or check the feed.

5.4. If the printer exceeds temperature 75°, 'TEMP OVER' will display. Allow the unit to cool down before continuing.

ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

REGISTER YOUR PURCHASE HERE

WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

BATTERY REMOVAL SEE SECTION 4.1.5

Under the Waste Batteries and Accumulators Regulations 2009, Jack Sealey Ltd are required to inform potential purchasers of products containing batteries (as defined within these regulations), that they are registered with Valpak's registered compliance scheme. Jack Sealey Ltd Batteries Producer Registration Number (BPRN) is BPRN00705.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.
Important: No Liability is accepted for incorrect use of this product.
Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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