



INSTRUCTIONS FOR:

## DIGITAL BATTERY & ALTERNATOR TESTER 12V

MODEL NO: **BT01**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions and maintained properly, 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 Instruction Manual



Wear eye Protection



Wear Protective Clothing



Wear Protective Gloves



Explosive Material



Corrosive Substance

### 1. SAFETY

**DANGER! BE AWARE, LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS VERY IMPORTANT TO READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY, EACH TIME YOU USE THE BATTERY TESTER.**

Follow these instructions and those published by the battery and vehicle manufacturers, and the maker of any equipment you intend to use in the vicinity of the battery. Remember to review warning marks on all products and on engines.

#### 1.1. Personal Safety

- WARNING!** Wear approved eye protection. Wear appropriate Personal Protective Equipment. A full range of Personal Protective Equipment is available from your Sealey stockist.
- ✓ Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current high enough to melt or weld a ring, which would cause severe burns.
- ✓ Ensure that hands and clothing are clear of fan blades and other moving or hot engine parts. Remove ties and ensure that belts cannot become entangled.
- ✓ Ensure that there is another person within hearing distance and is able to come to your aid should a problem arise when working near a lead-acid battery.
- ✓ Have fresh water nearby in case battery acid contacts skin or clothing; flush affected area immediately. If acid enters eyes, flush immediately with clean running water for a minimum of 15 minutes, seek medical attention.
- \* **DO NOT** smoke or allow a spark or flame in the vicinity of the battery or engine.

#### 1.2. General Safety

- ✓ 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 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.
- ✓ Clean battery terminals 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, remember that 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.
- ✓ Modern vehicles contain extensive electronic systems. You are required to check with the vehicle Manufacturer, for any specific instructions regarding the use of this type of equipment on each vehicle.

### 2. INTRODUCTION

Compact device which accurately tests battery, cranking and alternator. No heat, no sparks and no misdiagnosis. Just key in the battery rating from the top of the battery and results are displayed on an LED control panel. No internal battery and will test batteries with a residual charge of just 7V.



4.1.14. Press <<ENTER>> return to step 4.1.5 or remove the test clamps from the battery posts after completion of testing.

4.1.15. All selected data will be memorized after test, including battery type, battery CCA standard, capacity of CCA, etc.

#### 4.2. STARTER SYSTEM TEST

4.2.1. LED display will light and show the voltage of the battery **XX.XX** on the screen. Press "ENTER" to the next step.

**NOTE** : If you see **HI / Lo / Blank/ ----** appeared on the screen or screen flickers, please refer to TROUBLESHOOTING.

4.2.2. Press ▲/▼ key to select the system test: SySt. Press 'ENTER' to the next step.

4.2.3. Please press ▲/▼ key to select the battery test: bAtt. Press 'ENTER' to the next step.

4.2.4. Turn off all vehicle accessory loads such as lights, air conditioning, radio, etc. before starting the engine.

4.2.5. The screen shows CrAn. press "ENTER" button to read the minimum voltage of the battery.

4.2.6. Start engine.

A. **Green LED lights** = Starting system OK.

B. **Yellow LED lights** = Starting system weak. Check connections, wiring, and starter.

C. **Red LED lights**, the screen shows blank or the screen shows the voltage of the battery **XX.XX**= Starting system problem.

Check connections, wiring, and starter.

#### 4.3. CHARGING SYSTEM TEST

4.3.1. After starter test, press "ENTER" button to go to charging system test, the screen shows CHAr. Press "ENTER" button to read live voltage.

4.3.2. Run up engine to 1200 ~ 1500 rpm. Read the voltage while the car is running.

A. **Green LED lights.** = Charging system OK.

B. **Red LED lights.** = Charging voltage high. Check regulator.

C. **Yellow LED lights.** = Charging voltage low. Check connections, wiring and alternator.

4.3.3. With the engine at idle, continue the charging system test whilst loading electrical system. Turn the blower to high, headlights (high beam) and heated rear window. Do not use loads such as air conditioning or windscreen wipers.

A. **Green LED lights.** = Charging system OK.

B. **Red LED lights.** = Charging voltage high. Check regulator.

C. **Yellow LED lights.** = Charging voltage low. Check connections, wiring and alternator.

4.3.4. Turn engine off and remove the test clamps from the battery posts after completion of test.

### 5. TROUBLESHOOTING

5.1. - If the screen shows **HI**:

Voltage of the tested battery is over 15.00V. BT01 won't work under this situation. Please re-check if the tested battery is 12Volts.

5.2. - If the screen shows **Lo**:

Voltage of the tested battery is under 7 Volts. BT01 won't work under this situation. Please recharge the battery and retest. If reading is the same, the battery should be replaced immediately.

5.3. - If the screen shows blank:

A. The voltage of the tested battery is too low to operate the BT01. Recharge the suspect battery and retest. If reading is the same, the battery should be replaced immediately.

B. The clamps are cross connected. Connect the clamps correctly.

5.4. - The screen flickers or shows ----:

The voltage is unstable. Recharge the battery and retest. If reading is the same, the battery should be replaced immediately.

#### 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.



#### 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.

**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.

**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.

Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR



01284 757500



01284 703534



sales@sealey.co.uk



www.sealey.co.uk