SEALEY Professional TOOLS
AUTO SERVICE LINE

INSTRUCTIONS FOR:

DIGITAL BATTERY TESTER WITH PRINTER

MODEL No: **BT2013.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. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

1. SAFETY INSTRUCTIONS

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 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 and soap nearby in case battery acid contacts skin, clothing, or eyes.
- ✓ Wash immediately with soap and 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 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** disassemble 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.

2. INTRODUCTION & SPECIFICATION

Fast, accurate diagnosis and recording of battery faults. Tests battery condition and charge level. LCD Screen shows easy-to-follow test prompts and results. Integral printer will produce hard-copy results for your own or customer's records. Suitable for GEL, AGM, VRLA, SLI batteries. Supplied with carry-case, four AA batteries, two printer rolls and instruction manual.

Rated Battery Voltage: 6-12V	Min. Power Requirement:. 1V
Charging System Capability:. 12, 24V	Printer rolls (Pack of 2): BT2003.01
Rated Systems:. . . . . DIN, EN, IEC, JIS, SAE	Note: CCA = Cold Cranking Amps
Test Range:. . . . . 25-1300CCA DIN	
. . . . . 40-2100CCA EN	
. . . . . 30-1500CCA IEC	
. . . . . By battery type JIS	
. . . . . 40-2000CCA SAE	

3. OPERATION & USE

❒ **WARNING!** Ensure that you read, understand and apply the safety and operational instructions before connecting 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.

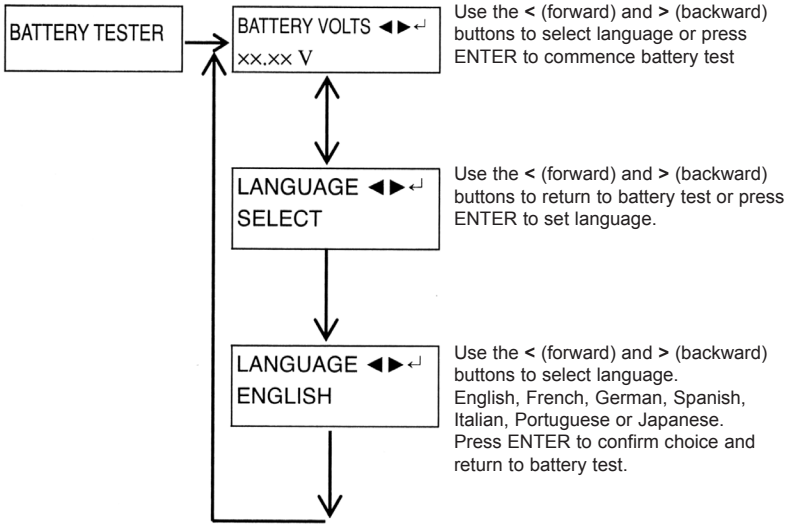
3.1 PREPARATION

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

3.1.1 Check battery casing for cracks or leakage. If damage is found DO NOT test, replace battery.
3.1.2 Clean battery terminals.
3.1.3 If possible, check electrolyte levels and top-up with distilled water as necessary.
3.1.4 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 misdiagnosis.**
3.1.5 Confirm that the 4 x AA Batteries (supplied) are correctly fitted in the compartment in the rear of the tester.
Note that nothing will be seen on the display until the tester is connected to a vehicle battery.
3.1.6 Connect the red clamp to the positive (+) battery terminal and the black clamp to the negative (-) terminal. When the internal battery becomes discharged the display will read **INTERNAL BATTERY LOW.**
3.1.7 If there is a poor connection the display will read **CHECK CLAMPS**, otherwise the display will read **BATTERY TEST.**
3.1.8 Paper Load: Open the clear cover. Insert the paper in the feeder, it will auto feed in to the printer. Press the paper feed button to bring more paper through.

3.2 DISPLAY GENERAL

By pressing the **< (forward) and > (backward)** buttons the display will cycle through the options. Press **ENTER** button when the option you require is displayed.



Battery Type:

Regular liquid.
AGM Flat Plate.
AGM Spiral.
Gel.

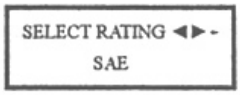
3.3 BATTERY TEST

3.3.1 With battery test screen displayed press ENTER.

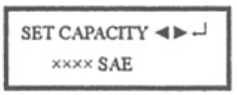
3.3.2 Use the **<** (forward) and **>** (backward) buttons to select the battery type: Regular Liquid, AGM Flat Plate, AGM Spiral or Gel.

Press ENTER to confirm choice.

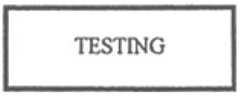
3.3.3 Use the **<** (forward) and **>** (backward) buttons to select the battery rating: SAE, EN, IEC, DIN or JIS.
Press ENTER to confirm.



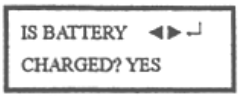
3.3.4 Use the **<** (forward) and **>** (backward) buttons to input the battery capacity.
CCA:
DIN: 25 - 1300
EN: 40 - 2100
IEC: 30 - 1500
JIS: By battery type
SAE: 40 - 2000
Press ENTER to begin test.



3.3.5 Battery being tested for a few seconds.



3.3.6 Press **<** (forward) or **>** (backward) buttons to select battery fully charged: **Yes** or **No.** Press ENTER to confirm choice.



3.3.7 When the test is complete, the LCD shows the actual volts and CCA
Press **<** (forward) or **>** (backward) buttons to select: SOH (State of Health) or SOC (State of Charge).

One of the following results will be displayed.

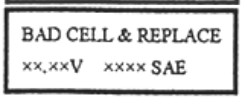
3.3.8 **GOOD & PASS:** Battery is capable of holding a charge.

3.3.9 **GOOD & RECHARGE:** The battery is good but needs to be recharged.

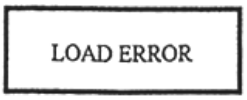
3.3.10 **RECHARGE & RETEST:** Battery is discharged, the battery condition cannot be determined until it is fully charged. Recharge and retest.

3.3.11 **BAD & REPLACE:** The battery will not hold its charge. Replace.

3.3.12 **BAD CELL & REPLACE:** The battery has at least one cell short circuit. Replace.

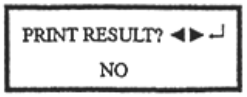


3.3.13 **LOAD ERROR:** The tested battery is larger than 2000CCA or 200Ah. Or the clamps are not connected properly. *Please fully charge the battery and retest after excluding both previous reasons. If reading is the same, the battery should be replaced immediately.*



NOTE! The operator is asked if any accessories are left on as a possible cause. If accessories are left on, the operator is instructed to charge and retest the battery. If accessories are not left on, the operator is instructed to replace the battery since the charging system is working and a good battery should have accepted a charge.

3.3.14 Press **<** (forward) or **>** (backward) buttons to select result printing: Yes or No. Press ENTER to confirm choice.



3.3.15 Press ENTER to return to the start screen or remove the clamps from the battery after completion of testing.

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 will be required for any claim.
INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.

SEALEY Professional TOOLS AUTO SERVICE LINE

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

01284 757500
01284 703534
www.sealey.co.uk
sales@sealey.co.uk