



12/24V DIGITAL START/STOP BATTERY & ALTERNATOR TESTER

MODEL NO: **BT105.V2**

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** place the tester near the engine or exhaust pipe, as high temperatures while the engine is running may cause damage.
- ✗ **DO NOT** remove battery clamps while testing.
- ✗ **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

Professional diagnostic tool supports Lead Acid, GEL, AGM and EFB batteries including Start Stop vehicle applications. Accurately tests battery condition, cranking performance and alternator output in a compact unit. Produces no heat no sparks and eliminates the risk of misdiagnosis during testing. Supplied with 850mm test cables for improved access in the engine bay. Battery rating is entered directly from the battery label with results clearly displayed on the LCD screen.

3. SPECIFICATION

Model No:	BT105.V2
Charging System Capability:	12V/24V
Languages:	English, Danish, Norwegian, Polish, Romanian, French, Spanish, German, Italian, Portuguese
Minimum Power Requirement:	12V
Nett Weight:	410g
Note:	*CCA - Cold Cranking Amps

SPECIFICATION CONTINUED	
Rating Systems:	CCA, BCI, CA, MCA, JIS, DIN, IEC, EN, SAE, GB
Voltage Range:	12-24V
Display:	128*64 Pixels, Backlit LCD 8-Line
Cable Reach:	850mm
Storage Temperature:	-20 ~ 70°C (-4 ~ 158°F)
Working Temperature:	-20 ~ 60°C (-4 ~ 140°F)
Battery Type:	FLOODED, AGM PLATED, AGM SPIRAL, EFB, GEL, LITHIUM ION
Battery Ratings:	CCA, BCI, CA, MCA, JIS, DIN, IEC, EN, SAE, GB

Battery System Standard Description	
CCA	Cold Cranking Amps (CCA): Specified by SAE and BCI, this is the most commonly used rating for a starting battery at 0°F (-17.8°C).
BCI	Battery Council International standard.
CA	Cranking Amps Standard, effective starting current value at 0°C.
MCA	Marine Cranking Amps Standard, effective starting current value at 0°C.
JIS	Japan Industrial Standard, displayed on the battery as a combination of numbers and letters (e.g., 55D23, 80D26).
DIN	German Auto Industry Committee Standard.
IEC	Internal Electro Technical Commision Standard.
EN	European Automobile Industry Association Standard.
SAE	Society of Automotive Engineers Standard.
GB	China National Standard.

4. FEATURES

1	LCD Display Screen.
2	Enter Button.
3	Up and Down Buttons.
4	Exit Button.
5	Cable Clips.

5. OPERATION

5.1. BEFORE TEST

When testing a battery in a vehicle, ensure that all accessory loads are switched off, the ignition key is removed, and all doors are closed.

1. Connect the red clamp to the positive (+) terminal and the black clamp to the negative (-) terminal.

2. For a proper connection, rock the clamps back and forth. The tester requires both sides of each clamp to be firmly connected before testing. A poor connection will produce a CHECK CONNECTION OR WIGGLE CLAMPS message appears, clean the terminals and reconnect the clamps.

3. The preferred test position is at the battery terminals. If the battery is not accessible, you may test at the jumper post; however, the available power measurement may be lower than the actual value.

NOTE: The battery type and CCA (Cold Cranking Amps) value (marked on the battery label). Please refer to this information before use.

5.2. HOW TO USE

The engine and all other accessory loads must be switched OFF during testing to ensure accurate results. If the battery has just been fully charged, turn on the vehicle headlamps for 2-3 minutes until the battery voltage returns to its normal level before testing.

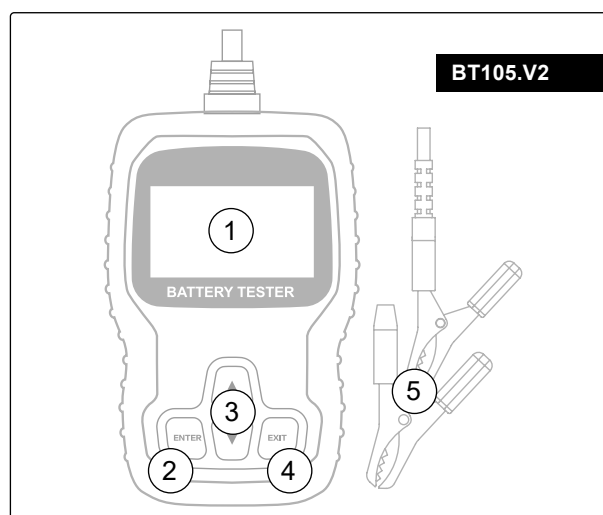
5.3. STEPS

1. Connect the red (+) battery clamp to the positive (+) battery terminal, and the black (-) battery clamp to the negative (-) terminal. Ensure both clamps are firmly and securely attached to the battery terminals to obtain accurate results.

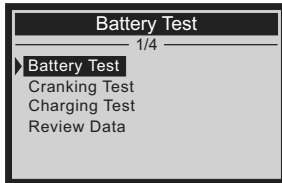
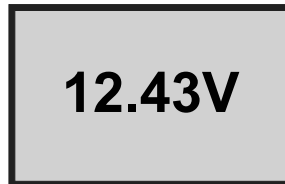
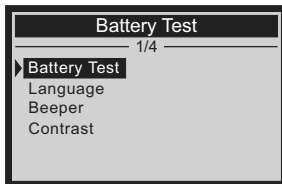
NOTE: If the positive and negative battery terminals are not properly connected, the following warning message will be displayed.

The positive (red test clip) contact is bad, please check

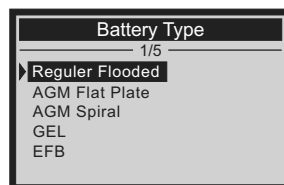
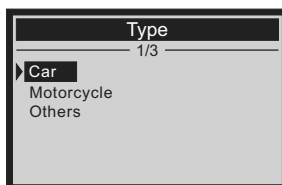
The negative (black test clip) contact is bad, please check



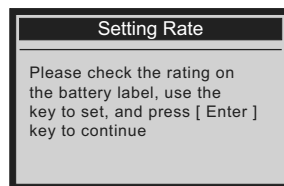
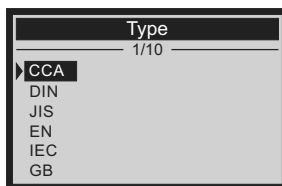
2. Press the "EXIT" key to enter the boot interface, then press "ENTER" and select "Battery Test".



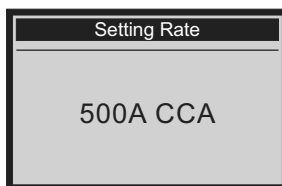
3. Press the "UP" or "DOWN" key to select the "Battery Type" (as specified on the battery rating label), then press "ENTER" to continue.



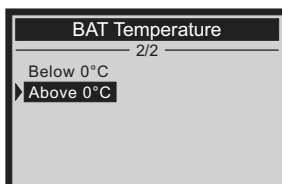
4. Press the "UP" or "DOWN" key to select the correct testing standard (as specified on the battery rating label), then press "ENTER" to continue.



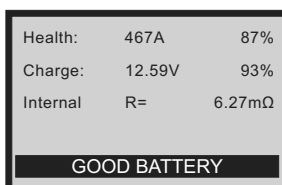
5. Press and hold the "UP" or "DOWN" key to select the battery rating value (as specified on the battery rating label).



6. Press "ENTER" to start the battery test. Ensure the correct test environment is selected before proceeding.



7. The test results are displayed as follows:



5.4. BATTERY TEST RESULTS

DECISION	INTERPRETATION
Good Battery	Return the battery to service.
Good - Recharge	Fully charge the battery and return it to service.
Charge & Reset	Fully charge the battery and retest. Failure to fully charge the battery before retesting may cause inaccurate results. If "Charge & Retest" appears again after the battery has been fully charged, replace the battery.
Replace Battery	Replace the battery and retest. A Replace Battery result may also indicate a poor connection between the battery cables and the battery. After disconnecting the battery cables, retest the battery using the out-of-vehicle test before replacing it.
Bad Cell - Replace	Replace the battery and retest.

NOTE: During the battery test, select the appropriate values according to the battery's actual specifications to obtain an accurate assessment of its health.

When selecting the battery current rating, press the Up button once to increase the value by 5A, or press the Down button once to decrease the value by 5A. Adjust the current rating according to the battery's actual specifications.

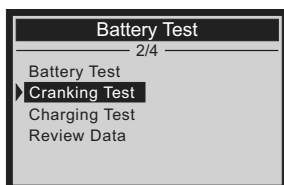
5.5. CRANKING TEST

5.5.1. Before the Test

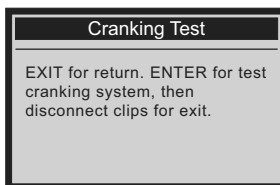
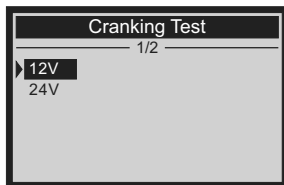
The engine and all other accessory loads must be turned OFF during the test in order to obtain accurate results.

5.5.2. Steps

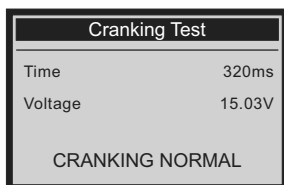
1. The RED (+) positive battery clamp is connected to the positive battery terminal, and the BLACK (-) negative battery clamp is connected to the negative battery terminal. Ensure that the clamps have a firm, secure grip on the battery terminals for accurate results.
2. Press the "EXIT" key to enter the boot interface, then press "ENTER" and select "Cranking Test".



3. Press "ENTER" into the "Cranking Test" interface:



4. Cranking test result:



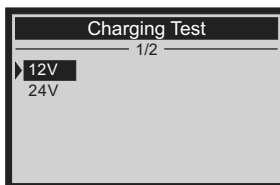
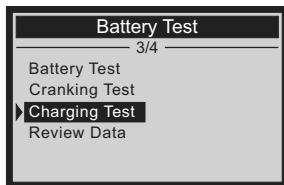
5.6. CHARGING TEST

5.6.1. Before the test

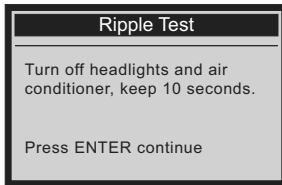
The engine must be ON during the test in order to obtain accurate results. Ensure all electrical accessories and devices remain in the OFF state.

5.6.2. Steps

1. The RED (+) positive battery clamp is connected to the positive battery terminal, and the BLACK (-) negative battery clamp is connected to the negative battery terminal. Ensure that the clamps have a firm, secure grip on the battery terminals for accurate results.
2. Press the "EXIT" key to enter the boot interface, then press "ENTER" and select "Charging Test".

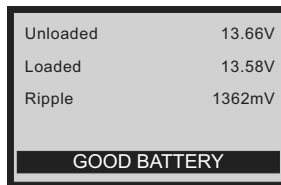
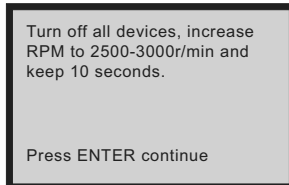


3. Press "ENTER" into the "Ripple Test" interface:



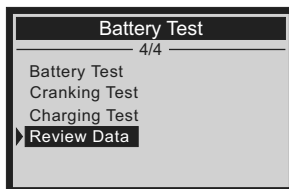
4. Press "ENTER" again, or wait for a few seconds, the tester prompts the operator to "Turn off all devices, increase RPM to 2500-3000r/min and keep 10 seconds".

Press "ENTER" to get the test result.



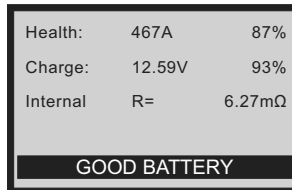
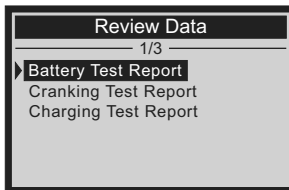
5.7. REVIEW DATA

1. Press the "EXIT" key to enter the boot interface, then press "ENTER" and select "Review Data".



2. Press "ENTER" to access the "Review Data" interface.

Only the results from the most recent test will be displayed.



6. MAINTENANCE

- 6.7.1. To keep your 12/24V Digital Start/Stop Battery & Alternator/Starter Tester in good working condition, disconnect it from the battery before cleaning and wipe the housing, display, and test leads with a soft, dry, or slightly damp cloth. **DO NOT** use solvents, abrasive cleaners, or immerse the tester in water, as these may damage the unit. Regularly inspect the test leads and clamps for signs of wear, damage, corrosion, or loose connections, and ensure the clamp contact surfaces remain clean to maintain accurate test results. Store the tester in a clean, dry place away from excessive heat, moisture, and direct sunlight, and avoid dropping or exposing it to strong impacts. With proper cleaning, careful handling, and routine inspections, the tester will continue to provide reliable battery, starter, and alternator diagnostics.

7. END OF LIFE

At the end of its service life, **DO NOT** dispose of this tester with household waste. Dispose of the product in accordance with local regulations for electrical and electronic equipment recycling. Where applicable, remove and recycle any internal batteries separately according to local requirements. Proper disposal helps conserve natural resources and reduces the environmental impact of electronic waste.



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.

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.

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