

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 AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE, OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY.**

## 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 THIS PIECE OF EQUIPMENT.**

Follow these instructions and those published by the battery manufacturer 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.

- 3 Observe standard workshop safety procedures when using the Memory Master.
- 3 Ensure there is another person within hearing range, or close enough to come to your aid when working near, or with, lead-acid batteries.
- 3 Wear safety eye protection and protective clothing. Avoid touching eyes while working with or near a battery.
- 3 Have fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
- 3 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.
- 3 Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current high enough to weld a ring or the like to metal, which may cause severe burns.
- 3 Ensure hands, clothing (especially belts) are clear of fan blades and other moving or hot parts of engine, remove tie and contain long hair.
- 3 Keep the work area clean and uncluttered and ensure there is adequate lighting. Keep tools and other items away from the engine and ensure you can see the battery and working parts of engine clearly.
- 3 Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- 3 Keep children and unauthorised persons away from the working area.
- p **WARNING! DO NOT** use tester where there are flammable gases or liquids (especially petrol and diesel).
- p **WARNING! DO NOT** use tester on any vehicles other than those with 12 Volt DC systems.
- 7 **DO NOT** smoke or allow a spark or flame in the vicinity of battery or engine.
- 7 **DO NOT** dis-assemble tester. The tester must be checked by qualified service personnel only.
- 7 **DO NOT** get tester wet or use in damp or wet locations or areas where there is condensation.
- 7 **DO NOT** use the tester for any purpose other than that for which it is designed.
- 7 **DO NOT** pull the cables or clamps from the battery terminals.
- 7 **DO NOT** operate the tester if damaged.
- 3 When not in use store tester in a safe, dry, childproof location.

## 2. INTRODUCTION

The VS207 Memory Master will provide a supply to the vehicle, when the main battery is disconnected, to maintain equipment memories and also gives a simple and reliable method of determining vehicle battery charge and alternator output levels. Suitable for 12 volt systems only.

## 3. OPERATION

### 3.1. Battery testing

- 3.1.1. Equipment: Memory Master and cable with male cigarette lighter plug.
- 3.1.2. Connect cable co-axial plug into socket in the top end of the Memory Master.
- 3.1.3. **Depress and hold red button** on Memory Master and push the male plug into the vehicle lighter socket. Release red button.
- 3.1.4. Turn ignition switch on **but do not start engine**. Switch on headlights and after one minute read voltage as shown on the Memory Master LED display. Compare with figures below.  
**Less than 11.5V = Low charge**  
**11.5 to 12.0V = Partial charge**  
**Over 12.0V = High charge**

### 3.2. Alternator testing

- 3.2.1. Install Memory Master as for battery testing.
- 3.2.2. Start engine and let it run for at least 15 minutes.
- 3.2.3. With the engine at idle speed read the voltage shown on the LED display. Compare with figures below.  
**Less than 13.0V = Output voltage too low**  
**13.0 to 14.4V = Normal**  
**Over 14.4V = Output voltage too high**

**Note:** Alternatively, for this and the battery test, the Memory Master may be connected directly to the battery terminals using the clamp cable (ensure correct connection - see para.3.3.3.). In this case the ignition does not have to be turned on for the battery test unless required to enable the headlights.

### 3.3. Maintaining memory

- 3.3.1. Ensure all vehicle electrical systems are switched off.
- 3.3.2. Equipment: Memory Master, cable 'A' with male cigarette lighter plug, cable 'B' with clamps and a 12V (slave) lead-acid battery.
- 3.3.3. Connect co-axial plug of cable 'B' into socket in side of Memory Master and then connect clamps to slave battery ensuring that red, positive clamp is attached to positive (+) battery post and black, negative clamp is attached to negative (-) battery post. Indicators on Memory Master will show green. If attached to battery incorrectly indicators will show red.
- 3.3.4. Turn ignition switch on, **but do not start engine**.
- 3.3.5. Connect cable 'A' co-axial plug into socket in the top end of the Memory Master. **Depress and hold red button** on Memory Master and put the male lighter plug into the vehicle lighter socket. If either of the indicators shows red the Memory Master cannot be used on the vehicle - disconnect. If neither indicator shows red then release the button - indicators will show green, indicating a good connection.
- 3.3.6. The Memory Master will now support electronic system memories and the vehicle battery may be removed.  
**Warning! The terminal of the positive battery cable will remain 'LIVE' and must be prevented from coming into contact with any metalwork. Insulate immediately by placing in a heavy duty plastic bag.**
- 3.3.7. Replace/reconnect vehicle battery and then switch off ignition.
- 3.3.8. **Depress and hold the red button** on the Memory Master and remove plug from lighter socket. Release button and disconnect Memory Master from slave battery.

**Note:** The Memory Master has a compartment which will take a 9V PP3 battery. This battery can be used to power the memory maintenance function, **but only if there will be no electrical drain other than memory support**. Since courtesy lamps, under bonnet lamps, instrument lamps etc. are likely to be illuminated it is recommended that a slave battery (as above) is used. When a 9V battery is used the unit must be turned 'On' and 'Off' with the switch on the left hand side.

**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 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 call us on 01284 757525 and leave your full name and address, including postcode.

