

# BATTERY & ALTERNATOR TESTER

### 12V 2000CCA

#### **INSTRUCTION MANUAL**

#### **SPECIFICATIONS**

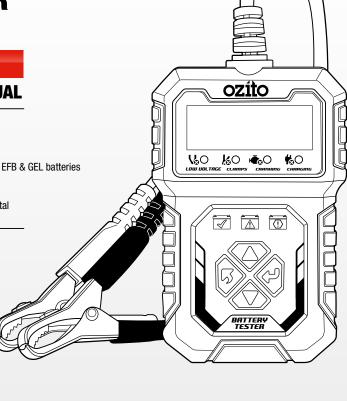
Input Max.: 12V DC Capacity: 100-2000 CCA

Suitable for: Lead Acid, AGM, EFB & GEL batteries

Operating Temp.: 0°C~50°C
Storage Temp.: -20°C~70°C
Display: 4 Character Digital
Weight: 0.15kg

ozito.com.au





#### STANDARD EQUIPMENT



12V Battery & Alternator Tester

**OCBA-1000** 

### WARRANTY

IN ORDER TO MAKE A CLAIM UNDER THIS WARRANTY YOU MUST RETURN THE PRODUCT TO YOUR NEAREST BUNNINGS WAREHOUSE WITH YOUR BUNNINGS REGISTER RECEIPT. PRIOR TO RETURNING YOUR PRODUCT FOR WARRANTY PLEASE TELEPHONE OUR CUSTOMER SERVICE HELPLINE:

Australia: 1800 069 486 New Zealand: 0508 069 486

TO ENSURE A SPEEDY RESPONSE PLEASE HAVE THE MODEL NUMBER AND DATE OF PURCHASE AVAILABLE. A CUSTOMER SERVICE REPRESENTATIVE WILL TAKE YOUR CALL AND ANSWER ANY QUESTIONS YOU MAY HAVE RELATING TO THE WARRANTY POLICY OR PROCEDURE.

The benefits provided under this warranty are in addition to other rights and remedies which are available to you at law.

Our goods come with guarantees that cannot be excluded at law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Generally you will be responsible for all costs associated with a claim under this warranty, however, where you have suffered any additional direct loss as a result of a defective product you may be able to claim such expenses by contacting our customer service helpline above.

#### 3 YEAR REPLACEMENT WARRANTY\*

Your product is guaranteed for a period of **36 months from the original date of purchase.** If a product is defective it will be replaced in accordance with the terms of this warranty. Warranty excludes consumable parts, for example: .

\*This product is intended for DIY use only and replacement warranty covers domestic use.

#### **WARNING**

#### The following actions will result in the warranty being void.

- If the tool has been operated on a supply voltage other than that specified on the tool.
- If the tool shows signs of damage or defects caused by or resulting from abuse, accidents or alterations.
- Failure to perform maintenance as set out within the instruction manual.
- · If the tool is disassembled or tampered with in any way.
- · Professional, industrial or high frequency use.

# **KNOW YOUR PRODUCT**

#### **12V BATTERY & ALTERNATOR TESTER**

1. Digital Display

7. Black Negative (-) Terminal Clamp

2. Error LED's

8. Up Button

9. Back Button

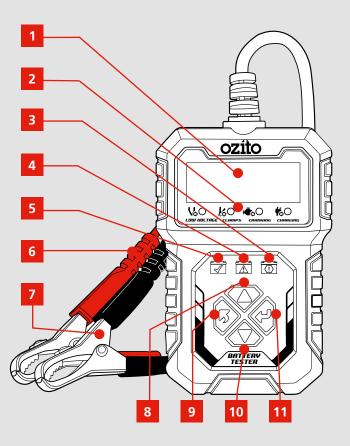
3. Test Result Red LED 4. Test Result Yellow LED

10.Down Button

5. Test Result Green LED

11.Enter Button

6. Red Positive (+) Terminal Clamp



#### **ONLINE MANUAL**

Scan this QR Code with your mobile device to take you to the online manual.





## **SETUP & PREPARATION**

#### 1. KNOW YOUR PRODUCT OVERVIEW

#### 1. Digital Display

Indicates voltage, CCA, general battery condition and test results.

#### 2. Error LED's

- Low Voltage: Indicates that the battery has a low voltage and should be charged.
- Clamps: Indicates the terminal clamps of the battery & alternator tester are not properly engaged with the vehicle battery. Ensure that the vehicle battery terminals and the terminal clamps are clean of grease and dust. Ensure the clamps are well engaged with the battery.
- Cranking: The starting system is abnormal and difficult to start.
- Charging: The charging system is abnormal, generator output voltage may be higher, lower or no output.

#### 3. Test Result Red LED

- Battery Test: Battery is bad and should be replaced.

#### 4. Test Result Yellow LED

- Battery Test: Battery is weak.

#### 5. Test Result Green LED

- Battery Test: Battery is ok.
- Charging Test: Charging system is ok.
- Cranking Test: Starting system is ok.

#### 6. Red Positive (+) Terminal Clamp

Connects to the positive (+) pole on your vehicle 12V battery.

#### 7. Black Negative (-) Terminal Clamp

Connects to the negative (-) pole on your vehicle 12V battery.

#### 8. Up Button

Scrolls up through menu items.

#### 9. Back Button

Returns to previous menu.

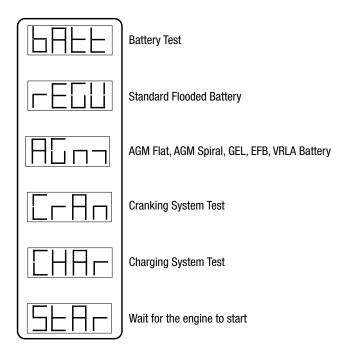
#### 10. Down Button

Scrolls down through menu items.

#### 11. Enter Button

Confirms a selection (or action) from a menu item.

#### **Digital Display Meaning**



#### **Battery System Standard Description**

**CCA:** Cold Cranking Amps.

**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.

**DIN:** German Auto Industry Committee Standard

**IEC:** International Electro Technical Commission standard.

**EN:** European Automobile Industry Association standard.

**SAE:** Society of Automotive Engineers.

GB: China National Standard.

#### **Measuring Range**

SAE: 100~2000 CCA EN: 100~2000 CCA CA: 100~2000 CA DIN: 100~1400 CCA IEC: 100~1400 CCA MCA: 100~2000 MCA CCA: 100~2000 CCA BCI: 100~2000 CCA GB: 30~220 Ah JIS: 26A17--245H52

#### 2. BATTERY CONNECTION



WARNING! READ AND UNDERSTAND THE WARNINGS BEFORE SETUP AND TESTING.



WARNING! ENSURE THE POWER CORD IS UNCOILED AND FULLY EXTENDED TO AVOID OVERHEATING THE POWER CORD. ENSURE THAT IT DOES NOT GET TANGLED OR CAUGHT IN ANY ROTATING PARTS WITHIN THE ENGINE COMPARTMENT OF THE VEHICLE.



ARNING! ONLY FOR 12 VOLT LEAD ACID BATTERY.



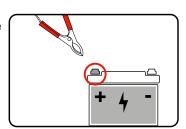
WARNING! CHECK CORD AND CLAMP FOR DAMAGE BEFORE EVERY USE. DO NOT USE IF CORD OR CLAMP INSULATION IS MISSING OR DAMAGED AND WIRE IS EXPOSED.

#### **Connecting to a Vehicle Battery**

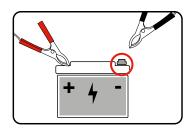
Before testing make sure the battery terminals are really clean as grease and dust could lead to errors in the test results. The battery MUST be disconnected prior to cleaning. Check the battery and connections for any cracks or damage before proceeding with cleaning and testing. To help ensure a good connection of the battery terminal clamps, clean the battery terminals with a solution of baking soda and water, and wipe the battery terminals with a cloth to remove any dirt and grease.

If the battery is still fitted to a motor vehicle, make sure that all the electronics are turned OFF, and that the ignition is turned OFF.

 With the vehicle engine not running, connect the red positive terminal clamp to the positive (+) pole on your vehicle 12V battery.

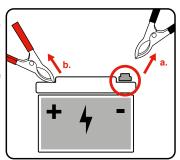


 Connect the black negative terminal clamp to the negative ( – ) pole on your vehicle 12V battery.



### **Disconnecting from a Vehicle Battery**

- Remove the black negative terminal clamp from the negative
   pole of your vehicle battery.
- 2. Remove the red positive terminal clamp from the positive (+) pole of the vehicle battery.



#### 3. BATTERY ANALYSIS

Check the battery terminal clamps are correctly connected to the lead acid battery. Twist the terminal clamps slightly to ensure a good connection. It is recommended that an assistant be present to assist with all tests.

#### **Battery Test**

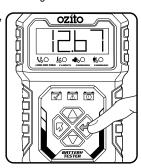
Before testing battery, if it is in a vehicle, turn off all vehicle accessory loads such as lights, air conditioning, radio etc. Ensure battery is fully charged before testing.

Only test a single battery at a time with the Battery Test Function. If the battery requires repeat testing using the battery test function, after 1 minute of testing, allow the battery tester to rest for 10 minutes before proceeding.

Note: If the vehicle has been running before testing, the battery holds a surface charge. Turn on headlights for 30 seconds to remove surface charge. Let battery rest for one minute before starting to test.

- 1. Connect the battery tester to the battery, following the instructions specified in the "Battery Connection" section.
- 2. The digital display will show the battery voltage, press the "Enter" button to the next step.

Note: If the Low Voltage LED lights up, disconnect the battery tester and charge the battery before attempting the "Battery Test" again.

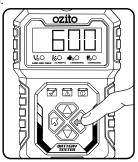


- 3. Press the "Up" and "Down" to select "batt" battery and press "Enter" hutton
- 4. Press the "Up" and "Down" to select the battery type REGU or AGM (REGU standard wet battery / AGM - VRLA, GEL, AGM, EFB etc sealed battery).
- 5. Press "Enter" button to confirm selection.
- 6. Press the "Up and "Down" buttons to select the desired battery rating SAE, DIN, IEC, EN, CA, MCA, JIS, BCI, CCA, GB. For general testing select CCA.



- 7. Press "Enter" button to confirm selection.
- Press the "Up" and "Down" buttons to input the battery cold cranking amps (CCA). Refer to the battery rating label of the battery being tested.
- 9. Press "Enter" button to confirm selection and start the test.
- 10. Battery analysis will begin.
- 11. When the test is complete, the digital display will show the CCA value. The test result LED will also illuminate.
- Green LED = battery is ok.
- Yellow LED = battery is weak.
- Red LED = battery is bad. Need to change the battery immediately.
- 12. Turn engine off before disconnecting from the vehicle battery.



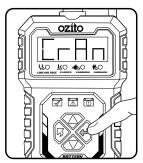




#### **Cranking Test**

With the battery terminal clamps correctly connected and before having your assistant start the engine, turn off all vehicle accessory loads such as lights, air conditioning, radio etc.

- 1. Press the "Down" button to select the system test CRAN.
- 2. With CRAN on the digital display, press "Enter" button.
- 3. Have your assistant start the engine.



- 4. When the test is complete, the digital display will show the cranking voltage. The test result LED will also illuminate.
- -Green LED = When starting system is ok.



- -Cranking Error LED= When starting system is abnormal and difficult to start.
- 5. Turn engine off before disconnecting from the vehicle battery.



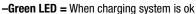
# **OPERATION (cont.)**

#### 3. BATTERY ANALYSIS (cont.)

#### **Testing the Charging System**

With the battery terminal clamps correctly connected and before having your assistant start the engine, turn off all vehicle accessory loads such as lights, air conditioning, radio etc.

- 1. Have your assistant start the engine.
- 2. Press the "DOWN" button to select the system test CHAR.
- With CHAR on the digital display, press "enter" button to read the voltage of the battery.
- When the test is complete, the digital display will show the lowest and highest charging voltage during test. The test result LED will also illuminate.







-Charging Error LED = When charging system is abnormal, generator output voltage may be higher, lower or no output.



5. Turn engine off before disconnecting from the vehicle battery.

### **MAINTENANCE**



WARNING! BEFORE CLEANING THE APPLIANCE MAKE SURE THAT IT IS DISCONNECTED FROM THE VEHICLE.

#### Cleaning

- We recommend that you clean the device immediately each time you have finished using it.
- Keep the battery & alternator tester dry, clean and free from oil, water and grease.
- Clean the appliance regularly with a cloth. Do not use cleaning agents or solvents; these may be aggressive to the plastic parts in the appliance. Ensure that no water can get into the interior of the appliance.

#### Storage

 The battery & alternator tester should be placed in a dry room for storage.

**Note:** Ozito Industries will not be responsible for any damage or injuries caused by the repair of the tool by an unauthorised person or by mishandling of the tool.

### **CARING FOR THE ENVIRONMENT**



Power tools that are no longer usable should not be disposed of with household waste but in an environmentally friendly way. Please recycle where facilities exist. Check with your local council authority for recycling advice.



Recycling packaging reduces the need for landfill and raw materials. Reuse of recycled material decreases pollution in the environment. Please recycle packaging where facilities exist. Check with your local council authority for recycling advice.

### **SPARE PARTS**

Spare parts can be ordered from the Special Orders Desk at your local Bunnings Warehouse.

For further information visit

www.ozito.com.au or contact Ozito Customer Service:

Australia 1800 069 486

New Zealand 0508 069 486

E-mail: enquiries@ozito.com.au

### **BATTERY TESTER SAFETY WARNINGS**



WARNING! Save all warnings and instructions for future reference



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

- This appliance is only intended for lead acid batteries
- This appliance is not intended for use by young or infirm persons unless supervised by a responsible person to ensure that they can use the appliance safely.
- The warnings, cautions and instructions discussed in this instruction manual cannot cover all
  possible conditions and situations that may occur.
- Common sense and caution are factors that cannot be built into this product but must be supplied by the operator.
- It is recommended to work with someone who can come to your aid when working near a lead acid battery.
- Do not come in contact with leaking battery.
- Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
- If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least ten minutes and get medical attention immediately.
- Be extra cautious to reduce risk of dropping a metal tool onto the battery. It could spark or short-circuit the battery or other electrical parts and could cause an explosion.
- Remove personal metal items such as rings, bracelets, necklaces and watches when working with a lead acid battery. It can produce a short circuit current high enough to weld a ring or the like to metal causing a severe burn.
- Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.
- Before testing inspect the battery for cracks or broken case or cover. Of the battery is damaged, do not use tester

#### **Work Area**

- Operate in a safe work environment. Keep your work area clean and well lit.
- Keep anyone not wearing the appropriate safety equipment away from the work area. Note: Minimize distractions in the work environment.
- Distractions can cause you to lose control of the tool.
- When connecting the battery tester cables to the battery, avoid creating sparks; especially when the battery is being charged. Explosive gases are created during charging. Sparking could also damage the vehicle electrical system.
- Always lock up tools and keep them out of the reach of children
- Do not expose battery tester to rain, snow or wet conditions.
- Stay clear of hot engine and car parts.

#### **Personal Safety**

- Wear ANSI-approved safety goggles and protective gloves during set up and use of the Battery Tester.
- Test in a well ventilated area. Explosive gases may be produced during testing. Do not smoke, cause sparks, or strike matches near the battery when testing.
- Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear steel-toed boots to prevent injury from falling objects.

- Refer to the user manual of the battery being tested for testing instructions and precautions prior to using the battery tester.
- Do not connect in reverse polarity.
- Use this product in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of this product for operations different from those intended could result in a hazardous situation.
- This product is not a toy. Keep it out of reach of children.
- Maintain labels and nameplates on the unit. These carry important safety information.
- People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
   Caution is necessary when near coil, spark plug cables, or distributor of running engine. Engine should be off during distributor adjustment.
- Undercharged lead-acid batteries will freeze during cold weather. Do not test or charge a frozen battery.
- Do not smoke or have open flames near the battery.
- Never remove battery load tester clamps while testing.
- Ensure automatic vehicles are in park with the handbrake engaged before starting the engine.
- Ensure manual vehicles are in neutral with the handbrake engaged before starting the engine.
- Put blocks on drive wheels and never leave car unattended while running tests.
- Road Safety Road Rules 2009 penalty code 2135, it is illegal to leave "motor vehicle unattended with keys in ignition, motor running, brakes not secured or doors unlocked.

#### Risk of Electric Shock

- Never touch the clamps and the terminals with wet hands.
- Do not pull the clamps from the terminals by pulling on the clamp cables.
- Check the clamp leads for damage before every use.
- Be certain of the test battery polarity before connecting the battery tester clamps. The RED (+) positive battery clamp goes to the positive terminal of the battery. The BLACK (-) negative battery clamp goes to the negative terminal of the battery. Reversing the battery tester battery clamps on the battery may damage the battery tester.
- Do not drop the battery tester as it may affect proper operation.
- Do not smoke or have open flames near the battery.
- The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
- Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.

#### **Tester Use and Care Instructions**

- This battery tester was designed for specific functions. Do not modify, disassemble or alter the battery tester, all parts and accessories are designed with built-in safety features that may be compromised if altered.
- Do not use the battery tester in a way for which it was not designed.

### **DESCRIPTION OF SYMBOLS**

v	Volts	A	Amperes
DC	Direct current	CCA	Cold Cranking Amps
<b>®</b>	Regulatory Compliance Mark (RCM)	Ŵ	Warning
<b>③</b>	Read Instruction Manual		