

Battery Load Tester

OCBLT-100

OZITO

BATTERY LOAD TESTER

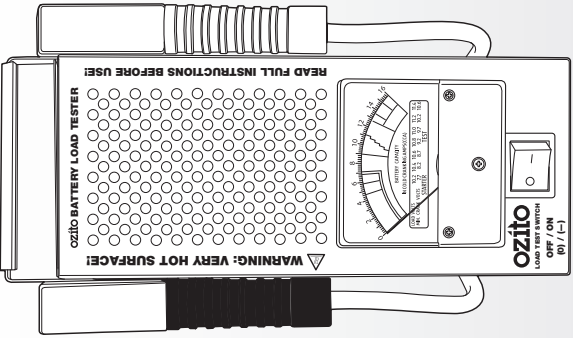
6 / 12V 100A

INSTRUCTION MANUAL

SPECIFICATIONS

- Battery Test Capacity: 6V - 12V DC Load Test Capacity: 6V - 50A 12V - 100A
- Amper Capacity: 200 - 1000 CCA
- Accuracy: +/- 0.2V
- Weight: 1.1 kg

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WARNING: VERY HOT SURFACE!

READ FULL INSTRUCTIONS BEFORE USE!

GENERAL POWER TOOL SAFETY WARNINGS

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.

1. Work area safety
 - a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
 - b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
 - c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
2. Electrical safety
 - a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
 - b. Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
 - c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
 - d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
3. Personal safety
 - a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
 - b. Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
 - c. Power unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, plugging in or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

BATTERY TESTER 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 not intended for Lithium 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.
 - Do not attempt 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.
 - Remove plenty of fresh water and soap nearby in case battery acid contacts skin, clothing or eyes.
 - Battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eyes, flush eyes with running cold water for at least 10 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 in spot the battery for cracks or broken case or cover. If the battery is damaged, do not use battery load 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. Minimize distractions in the work environment.
 - Distractions can cause you to lose control of the tool.
 - When connecting the battery load 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 load 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 load 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-toe 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 load tester.
 - Do not connect in reverse polarity.
- Risk of Electric Shock**
 - Do not 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 load 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 load tester battery clamps on the battery may damage the battery load tester.
 - Do not drop the battery load tester as it may affect proper operation. Do not operate the battery load tester if it has received a large blow or is damaged.
 - 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. The user manual cannot be built into this product, but must be supplied by the operator before connecting.
 - 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**
 - WARNING!** Do not touch the cooling vents on the battery load tester during or immediately after testing the battery. They become very hot.
 - Check that the switch of the battery load tester is in the "OFF" (0) position and is functioning correctly prior to use. The switch should automatically switch to the "OFF" (0) position once released, if the switch does not do this do not use the battery load tester.
 - The battery load tester produces heat when in use. Do not exceed recommended testing time in manual instructions. Allow sufficient time of 5 minutes or more for the battery load tester to cool down between tests to avoid injury due to heat build up of the Battery load tester surface.
 - This battery load tester was designed for specific functions. Do not modify, disassemble or alter the battery load tester, all parts and accessories are designed with built-in safety features that may be compromised if altered.
 - Do not use the battery load tester in a way for which it was not designed.

- d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- h. Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.
- i. Power tool use and care
 - a. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
 - b. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
 - c. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
 - e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
 - g. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
 - h. Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
5. Service
 - a. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

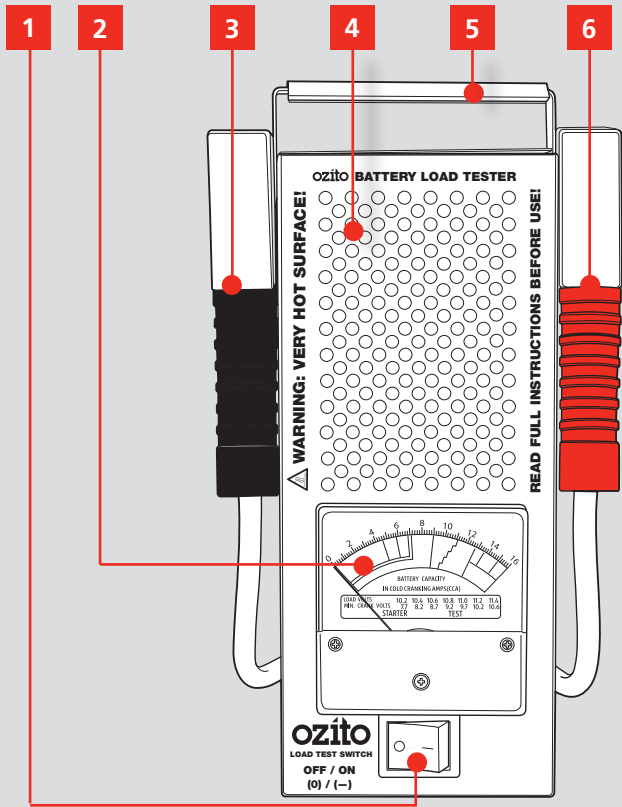
BATTERY TESTER WARNINGS

- 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. Consult your doctor if you have a heart pacemaker, 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 in drive wheels and never leave car unattended while running tests.
- Read Safety Rules: 2009 penalty code 21.35. It is illegal to use a motor vehicle unattended with keys in ignition, motor running, brakes not secured or doors unfastened.

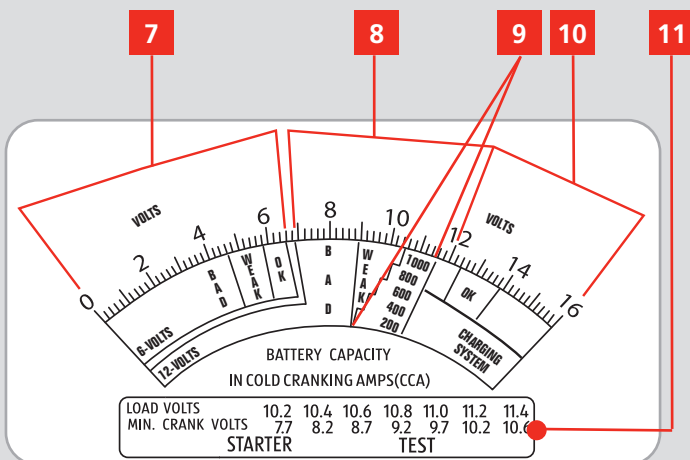
KNOW YOUR PRODUCT

BATTERY LOAD TESTER

1. Load Test Switch
2. Meter
3. Black Negative Terminal Clamp (-)
4. Cooling vents
5. Carry Handle
6. Red Positive Terminal Clamp (+)



7. 6V Load Test Range
8. 12V Load Test Range
9. Cold Cranking Amps Range
10. Charging Test Range
11. Starter Test Voltage Scale



ONLINE MANUAL

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



3 YEAR REPLACEMENT WARRANTY*

SETUP & PREPARATION

1. 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.

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.

WARNING! THE METAL HOUSING WILL GET VERY HOT AND WILL BURN SKIN OR CAUSE PROPERTY DAMAGE; WEAR PROTECTIVE GLOVES AND DO NOT PLACE HANDS, BODY OR ANY OBJECTS NEAR THE COOLING VENTS AREA.

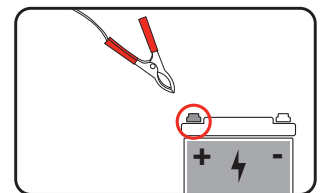
Connecting to a Vehicle Lead Acid Battery

Note: During first use, you will notice a little smoke and/or a burning smell coming from the unit. This is normal and will stop after a short burn-in period.

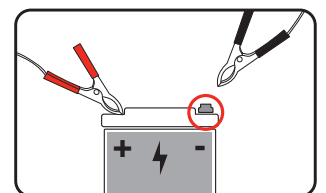
Before testing make sure the battery terminals are really clean as grease and dust could lead to errors in the test results. The battery MUST be disconnected prior to cleaning. Check the battery and connections for any cracks or damage before proceeding with cleaning and testing. To help ensure a good connection of the battery load tester 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, grease and any residual water.

1. Turn off vehicle ignition, all electronics and any loads.

2. With the vehicle engine turned off, connect the red positive terminal clamp to the positive (+) pole on your vehicles 12V or 6V lead acid battery.

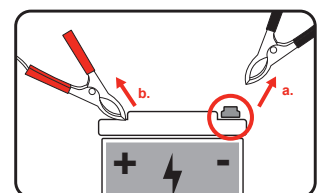


3. Connect the black negative terminal clamp to the negative (-) pole on your vehicles battery.



Disconnecting from a Vehicle Battery

1. 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.

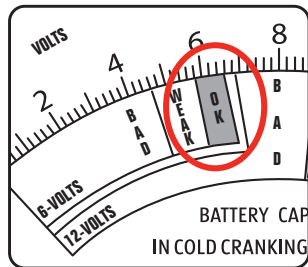
OPERATION

2. BATTERY ANALYSIS

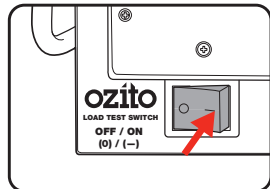
Check the battery terminal clamps are correctly connected to the lead acid battery. Twist the clamps slightly to ensure a good connection.

6V Battery Analysis

1. Confirm battery voltage is in the green "OK" area of the 6V Range area. If it is not in the OK range, disconnect the battery and recharge before retesting.



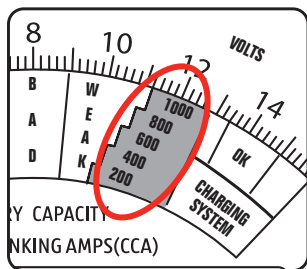
2. Press and hold the load switch in the ON (-) position for a maximum of 10 seconds while reading the meter. The needle should remain in the green area, if it does not, the battery is weak or bad.



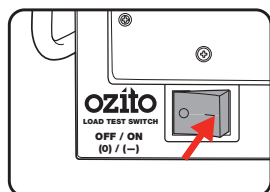
WARNING! TO PREVENT OVERHEATING, ALLOW UNIT TO COOL FOR 5 MINUTES BEFORE DEPRESSING THE LOAD SWITCH AGAIN IF FURTHER TESTING IS REQUIRED.

12V Battery Analysis

1. Confirm battery Cold Cranking Amps (CCA) on the meter that matches the CCA rating of the battery being tested.



2. Press and hold the load switch ON (-) position for a maximum of 10 seconds while reading the meter. The needle should indicate the approximate capacity (for 12V batteries 200-1000CCA), refer to **Battery Analysis** table in this manual or on the label.



WARNING! TO PREVENT OVERHEATING, ALLOW UNIT TO COOL FOR 5 MINUTES BEFORE DEPRESSING THE LOAD SWITCH AGAIN IF FURTHER TESTING IS REQUIRED.

Testing the Charging System

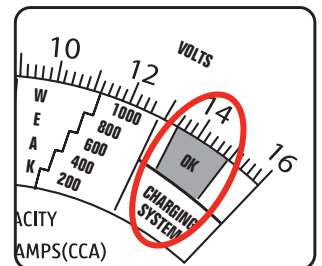
With the battery terminal clamps correctly connected to your vehicles Lead Acid Battery and all electronic accessories off.

WARNING! DO NOT PRESS THE LOAD SWITCH DURING THIS TEST.

WARNING! ENSURE LOAD TESTER AND CABLES ARE CLEAR OF ANY MOVING PARTS.

1. Start the engine and accelerate to 1200 - 1500 rpm.

2. Confirm reading is in the green "OK" position in the Charging Test Range area.



3. Turn on the headlights and fan motor on high, the meter should remain in the green "OK" area.

4. If the reading is in the red area or outside the charging system zone, the alternator may be defective.

Testing the Vehicles Starter Motor

This will identify excessive starter current draw, which makes starting difficult and potentially shortens battery life. It is best to load test the battery before starter motor test to ensure the battery is in good condition. If the battery tests either weak or bad, this test cannot be performed.

Note: The vehicles engine must be off and at normal operating temperature.

WARNING! DO NOT PRESS THE LOAD SWITCH DURING THIS TEST.

1. Perform a load voltage test to confirm battery's state of charge reading is in the green "OK" position and note the exact voltage.
2. Using the load voltage obtained in step 1, refer to the meter to select the minimum cranking voltage. Apply next higher minimum crank volts for engines with less than 200 CID.
 - For example, if the load voltage is 11.00, use 10.2 for the minimum cranking volts instead of 9.7.

IN COLD CRANKING AMPS(CCA)	
LOAD VOLTS	10.2 10.4 10.6 10.8 11.0 11.2 11.4
MIN. CRANK VOLTS	7.7 8.2 8.7 9.2 9.7 10.2 10.6
STARTER TEST	

3. The vehicles ignition must be disabled so the engine will not start. (Refer to the vehicle's instruction manual or contact a automotive professional technician for advice). The test works best if the starter cranks for 2 to 5 seconds.
4. With an assistant cranking the engine, view the meter voltage reading.
5. If the cranking volts during the test is less than the minimum cranking volts selected from the table, the starter current draw is excessive. If the starter cranks slowly, check for high resistance or poor connections.

OPERATION (cont.)

BATTERY ANALYSIS

LOAD TEST	BATTERY CONDITION
Good (Green)	Battery capacity is OK. Battery may or may not be fully charged. Check specific gravity of battery to determine state of charge, check the electrical drain or possible charging system trouble.
Weak or Bad, but the Needle remains steady (Yellow or Red)	Battery capacity is not satisfactory. Battery may be either defective or not fully charged. Check specific gravity to determine which condition exists. If charging does not bring specific gravity to full charge level, battery should be replaced.
Weak or Bad, but the Needle continues to fall (Yellow or Red)	Battery may be either defective or very run down. Release the Load Test Switch and note volt meter reaction. Voltage recovery to 12 volt or above within seconds indicates a defective battery. Slow voltage recovery indicates run down condition. For best results, check specific gravity.

MAINTENANCE

- If the enclosure of the battery load tester requires cleaning, do not use solvents. Use a moist, soft cloth only. Never immerse any part of the Battery load tester into liquid.
- Keep terminal clamps clean and dry at all times.

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.

DESCRIPTION OF SYMBOLS

V	Volts	A	Amperes
	Regulatory Compliance Mark (RCM)		Cold Cranking Amps
	Wear protective gloves		Warning
	Very hot surface. Do not touch!		Wear eye protection
	Read Instruction Manual		

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