

### 12V BATTERY/ALTERNATOR TESTER MODEL NO: CBAT2 PART NO: 6260106

# OPERATION & MAINTENANCE INSTRUCTIONS

ORIGINAL INSTRUCTIONS

DL0323

# INTRODUCTION

Thank you for purchasing this CLARKE product.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

# GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

# ENVIRONMENTAL RECYCLING POLICY



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

## **SAFETY INSTRUCTIONS**



WARNING: HIGH VOLTAGES ARE PRESENT AT THE FOLLOWING POINTS: - THE IGNITION COILS, DISTRIBUTOR CAP, IGNITION CABLE, SPARK PLUGS.



CAUTION: PLEASE READ THESE INSTRUCTIONS AS WELL AS THOSE IN YOUR VEHICLE HANDBOOK VERY CAREFULLY BEFORE USING THE TESTER, KEEP THEM IN A SAFE PLACE FOR FUTURE REFERENCE.

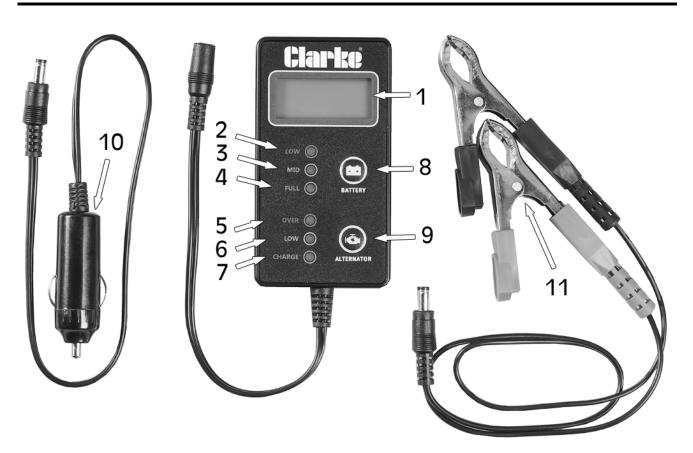
- 1. Clarke International are not liable for any damages or consequences resulting from:
  - Connection and installation errors.
  - Damage to the device due to mechanical influences or voltage surges or any modification to the device.
  - Any unauthorized manipulation to the product which would lead to cancellation of the guarantee.
  - Use of the device for purposes other than described in this instruction manual.
  - Any influence of fluids.
- 2. **DO NOT** use the device in a moist or wet environment.
- 3. **DO NOT** use the tester close to flammable materials.
- 4. **DO NOT** use the tester in an explosive environment.
- 5. Make sure the device is always positioned in a safe place.
  - The device must be placed out of reach of children.
  - **DO NOT** expose the device to direct sunlight or other heat source.
- 6. Store the tester in a safe, dry place after use.
- 7. **DO NOT** try to use other cables with this product.

- 8. **DO NOT** open the case, contains no replaceable parts inside the product.
- 9. If the device malfunctions, please consult your dealer.
- 10. **DO NOT** use the device while the vehicle is in motion, the tester is not suitable for permanent installation in a motor vehicle.
- 11. Make sure the vehicle is securely parked and the handbrake applied before using the tester. For vehicles with automatic transmissions the "park position" must be engaged and the hand brake must be engaged.
- 12. **DO NOT** use other measuring devices when using the tester.
- 13. Seek professional help if you are unsure about anything related to the electrical system in your vehicle.
- 14. When using the crocodile clips for testing, the red clip must be clamped to the positive pole (+ or Red) of the battery, and the black clip must be clamped to the negative pole (- or black). **DO NOT** reverse the connections.
- 15. If the outer insulation of the cable is damaged, it may cause a short circuit. Stop using it immediately and contact your Clarke dealer.

#### **OTHER INFORMATION**

- 1. The Battery Tester is suitable for all types of 12V lead acid batteries (vehicle batteries).
- 2. The device is **NOT** suitable for commercial purposes.
- 3. The device is **NOT** calibrated.

## **DISPLAY IDENTIFICATION**



1	LCD Display Screen	7	Alternator Test Indicator - Charge
2	Battery Test Indicator - Low	8	Battery Test Start Button
3	Battery Test Indicator - Medium	9	Alternator Test Start Button
4	Battery Test Indicator - High	10	12V Cigarette Lighter Test Lead
5	Alternator Test Indicator - Over	11	Crocodile Clips Test Lead
6	Alternator Test Indicator - Low		

# **OPERATION**

#### **FUNCTION DESCRIPTION**

- 1. Testing of all 12V vehicle lead-acid batteries.
- 2. Shows real-time voltage and battery charge with the results shown as LOW/MID/FULL.
- 3. Test charging system with the results shown as LOW/OVER/ CHARGE, and displays the charging voltage in real time.
- 4. Two options available for connecting:
  - Directly plug into the vehicles 12V cigarette lighter socket.
  - Connect directly to the battery terminals with attached crocodile clips test lead.
- 5. Protection of reverse polarity connection and over-current, with built in fuse.

#### PRECAUTIONS

- 1. **DO NOT** test a battery within a short period of time after charging or use, as the result maybe inaccurate.
- 2. Perform the test when the battery is in a cold state, when the voltage is stable.
- 3. Make sure all electrical equipment is turned off when testing.
- 4. Keep the vehicle stationary during testing. **DO NOT** test while the vehicle is being driven.

#### **BATTERY TEST**

- 1. Make sure that the vehicle ignition is in the off position.
- 2. Connect the tester to the battery via the crocodile clips or cigarette lighter test lead and the battery voltage value will be shown on the LED screen.
  - Testing with the Crocodile Test Lead: Connect the red clamp to the positive (+/red) terminal on the car battery, then connect the black clamp to the negative (-/black) terminal.

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- Testing with the Cigarette Lighter Test Lead: Insert the cigarette lighter test lead into the 12V DC cigarette lighter socket of the vehicle.
- 3. Turn off all electrical equipment and wait for the voltage to stabilize.
- 4. Press the Battery button to enter the battery test function. This will show on the LED screen the voltage value and the test result.
  - If the LOW light is on, it means that the battery power is very low and needs to be charged as soon as possible. Voltage: <11.8V.
  - If the MID light is on, it means the battery power is lower and needs to be charged. Voltage:  $\leq$ 11.8V MID <12.5V
  - If the FULL light is on, it means the battery is fully charged. Voltage:  $\geq 12.5V$
- 5. Once completed, remove the black clamp from the negative (-/black) terminal on the car battery then remove the red clamp from the positive (+/red) terminal or unplug the cigarette lighter test lead.

#### CHARGING SYSTEM (ALTERNATOR) CHECK

- 1. Connect the tester to the battery via the crocodile clips or cigarette lighter test lead and the battery voltage value will be shown on the LED screen.
  - Testing with the Crocodile Test Lead: Connect the red clamp to the positive (+/red) terminal on the car battery, then connect the black clamp to the negative (-/black) terminal.
  - Testing with the Cigarette Lighter Test Lead: Insert the cigarette lighter test lead into the 12V DC cigarette lighter socket of the vehicle.
- 2. Start the engine and keep the vehicle out of gear or in neutral
- 3. Turn off all electrical equipment, including headlights, airconditioning, glass heating, etc.
- 4. Increase the engine speed to 2500RPM or above.
- 5. Press the Alternator button to enter the charging system test mode. At this time the LED screen will show the charging voltage value and the test result.

- If the OVER light is on, it means that the alternator output voltage is high. Voltage  $\geq\!\!15\mathrm{V}$
- If the LOW light is on, it means that the alternator output voltage is low. Voltage: <13.5V
- If the CHARGE light is on, it means the charging system is normal. Voltage: ≤13.5 CHARGE < 15V</li>
- 6. Once completed, remove the black clamp from the negative (-/black) terminal on the car battery then remove the red clamp from the positive (+/red) terminal or unplug the cigarette lighter test lead.

## MAINTENANCE

#### CLEANING

- Before cleaning, disconnect the device from the electrical system.
- **DO NOT** use any liquid cleaning product.
- **DO NOT** use any inflammable cleaning product.
- **DO NOT** submerge the device or spill any liquids over it.
- If needed, clean the device with a light, damp, soft cloth.

# SPECIFICATION

Product Description	Alternator and Battery Tester	
Part number	6260106	
Operating Temp. Range	-20c - 70c	
Input Voltage	6V -25V (12V System)	
Measurement (H x W x D)	110 x 60 x 15 mm	
Product Weight	130g	
Compatible Battery Types	12V Lead Acid Batteries: WET (Flooded) MF (Maintenance Free) EFB (Enhanced Flooded) AGM (Absorbed Glass Mat) GEL VRLA (Valve Regulated Lead Acid) Lead Calcium SLA (Sealed Lead Acid) 12V LiFePO4 (Lithium Iron Phosphate)	

## **DECLARATION OF CONFORMITY - UKCA**

UK CA		
	Clarke	
	INTERNATIONAL	
	Hemnall Street, Epping, Essex, CM16 4LG	
	DECLARATION OF CONFORMITY	
This is	s an important document and should be retained.	
We hereby declare that th	is product(s) complies with the following legislation:	
Electromagnetic Co	mpatibility Regulations 2016	
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012		
The following standards h	ave been applied to the product(s):	
EN 55032:2015/A1:	2020/A11:2020, EN 55035:2017/A11:2020, EN IEC 61000-3-2:2019,	
EN 61000-3-3:2013	/A1:2019, IEC 62321-3-1:2013, IEC 62321-4:2013, IEC 62321-5:2013,	
IEC 62321-6:2015,	IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017.	
	n required to demonstrate that the product(s) meet(s) the requirement(s) of the las been compiled and is available for inspection by the relevant enforcement	
	The UKCA mark was first applied in: 2023	
Product Description:	12V Automotive Battery Tester	
Model Number(s):	CBAT2	
Serial/Batch Number:	Refer to product/packaging label	
Date of Issue:	28/02/2023	
Signed:	OMMAA	
olgitu.	John Carre	
	J.A Clarke	
	Director	
	Director	
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### **DECLARATION OF CONFORMITY - CE**

CE	Clarke
	INTERNATIONAL
	Fitzwilliam Hall, Fitzwilliam Place, Dublin 2
	DECLARATION OF CONFORMITY
This is	s an important document and should be retained.
We hereby declare that th	is product(s) complies with the following legislation:
2014/30/EU	Electromagnetic Compatibility Directive
2011/65/EU	Restriction of the Use of Certain Substances in Electrical Equipment Directive
The following standards I	nave been applied to the product(s):
EN 55032:2015/A1	:2020/A11:2020, EN 55035:2017/A11:2020, EN IEC 61000-3-2:2019,
EN 61000-3-3:2013	3/A1:2019, IEC 62321-3-1:2013, IEC 62321-4:2013, IEC 62321-5:2013,
IEC 62321-6:2015,	IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017.
The technical documentatic aforementioned legislation authorities.	on required to demonstrate that the product(s) meet(s) the requirement(s) of the has been compiled and is available for inspection by the relevant enforcement
	The CE mark was first applied in: 2023
Product Description:	12V Automotive Battery Tester
Model Number(s):	CBAT2
Serial/Batch Number:	Refer to product/packaging label
Date of Issue:	28/02/2023
Signed:	Johnalderse
	J.A Clarke
	Director
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