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Greluma ZL681LUM

Greluma 12V 24V Car Battery and Alternator Tester User Manual

Model: ZL681LUM

1. INTRODUCTION

Thank you for choosing the Greluma 12V 24V Car Battery and Alternator Tester. This device is designed to provide a simple and accurate way to assess the health of your vehicle's battery and charging system. It is suitable for both amateur and professional use, helping to diagnose potential issues before they become major problems. This manual will guide you through the proper use and maintenance of your tester.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Battery Test Function:** Determines if the battery needs replacement or just recharging.
- **12V/24V Compatibility:** Supports regular flooded, AGM flat plate, AGM spiral, and GEL batteries for various vehicles including cars, SUVs, motorcycles, and more.
- **7 LED Indicators:** Provides clear visual feedback on battery and alternator status (Green: Good/Full, Orange: Medium, Red: Low).
- **Durable Design:** Features reverse polarity protection to prevent damage from incorrect connections, and pure copper wires/clips for excellent conductivity.

2.2 Package Contents

- 1 x Greluma 12V 24V Car Battery and Alternator Tester
- 1 x User Manual (this document)



Figure 2.2.1: Greluma 12V 24V Car Battery Tester with connection clamps.

3. SAFETY INFORMATION

- Always wear eye protection when working with vehicle batteries.
- Ensure good ventilation in the work area.
- Keep the tester away from heat, sparks, and open flames.
- Do not touch the battery terminals or clamps with wet hands.
- Avoid short-circuiting the battery terminals.
- The device has reverse polarity protection, but always connect the red clamp to the positive (+) terminal and the black clamp to the negative (-) terminal.
- Keep out of reach of children.

4. SETUP

1. Ensure the vehicle's ignition is off and all accessories are turned off.
2. Locate the vehicle's battery.

3. Connect the **RED** positive (+) clamp of the tester to the positive (+) terminal of the battery.
4. Connect the **BLACK** negative (-) clamp of the tester to the negative (-) terminal of the battery.
5. Once connected, the tester will power on automatically.



Figure 4.1: Correct connection of the tester to a car battery.

5. OPERATING INSTRUCTIONS

The Greluma tester offers two main test modes: Battery Test and Charging Test. Use the 'Function Switch' button on the device to toggle between these modes.

5.1 Battery Test (Battery State)

1. Ensure the tester is connected to the battery as described in Section 4.
2. Press the 'Function Switch' button until the 'BATTERY TEST' indicator is lit.
3. Observe the LED indicators under 'Battery State' to determine the battery's condition.
4. For 12V batteries, refer to the 12V indicators. For 24V batteries, refer to the 24V indicators.

5.2 Charging Test (Alternator State)

1. Ensure the tester is connected to the battery as described in Section 4.
 2. Start the vehicle's engine and let it idle.
 3. Press the 'Function Switch' button until the 'LOADING TEST' indicator is lit.
 4. Observe the LED indicators under 'Alternator State' to determine the charging system's condition.
 5. For 12V systems, refer to the 12V indicators. For 24V systems, refer to the 24V indicators.
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6. UNDERSTANDING LED INDICATORS

The tester uses a series of LED lights to clearly indicate the status of your battery and charging system. The indicators are color-coded for easy interpretation:

Green (Full/Good): Indicates optimal condition. For battery test, the battery is in good condition with good load capacity. For charging test, the alternator is functioning correctly with good voltage.

Orange (Middle): Indicates moderate condition. For battery test, the battery is in moderate condition with average load capacity. For charging test, the battery is moderately charged.

Red (Low/Fault): Indicates poor condition or a fault. For battery test, the battery is in bad condition with low load capacity. For charging test, it indicates an abnormal condition, high voltage, or that the battery needs checking before charging.

12/24V Car Battery Tester



Figure 6.1: Detailed explanation of LED indicators for 12V/24V loading and charging tests.

7. MAINTENANCE

- After each use, wipe the tester and clamps with a clean, dry cloth.
- Store the device in a dry place, away from direct sunlight and extreme temperatures.
- Do not immerse the tester in water or any other liquid.
- Regularly inspect the cables and clamps for any signs of damage. Do not use if damaged.

8. TROUBLESHOOTING

- **Tester does not power on:** Ensure the clamps are correctly connected to the battery terminals (red to positive, black to negative). Check for a secure connection. Ensure the battery has sufficient voltage to power the tester (minimum 12V).
- **Inaccurate readings:** Ensure battery terminals are clean and free of corrosion. Ensure clamps have a good, solid connection. The battery should be at a stable temperature for accurate testing.
- **LEDs are dim or flickering:** This may indicate a low battery voltage or a poor connection. Recheck

connections or consider charging the battery before retesting.

9. SPECIFICATIONS

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|--------------------------|---|
| Brand | Greluma |
| Model Number | ZL681LUM |
| Compatible Voltage | 12V / 24V |
| Power Source | Cable Powered (from battery) |
| Compliant Specifications | CE |
| Dimensions (L x W x H) | 14.9 x 5.7 x 3.9 cm (approx. 5.87 x 2.24 x 1.54 inches) |
| Weight | 80 grams (approx. 2.82 ounces) |
| Country of Origin | China |



Figure 9.1: Product dimensions of the Greluma battery tester.

10. WARRANTY AND SUPPORT

Greluma products are designed for reliability and performance. If you encounter any issues or have questions regarding your 12V 24V Car Battery and Alternator Tester, please contact our customer support. Refer to your purchase documentation for specific warranty terms and contact information.

For technical assistance, please reach out to the seller via the Amazon messaging system. Our professional technical team aims to resolve issues within 24 hours.
