

ROLLING COMPONENTS LTD

(Wholesale distributors of Alternators and Starter Motors)



22 – 25 Paycocke Road
Basildon
Essex UK SS14 3DR
Tel: 00 44 (0) 1268 271035
Fax: 00 44 (0) 1268 527336



Overcharging Technical Bulletin

When 14.7V is considered okay

- Cold Start:-After starting a cold engine, the alternator often outputs 14.6–14.8V to quickly recharge the battery, which may have lost charge during cranking.
- While Charging a Low Battery:-If the battery is somewhat discharged, the voltage regulator may allow up to 14.7V to restore the battery to full charge more quickly.
- Modern Vehicles with Smart Charging Systems:-Some vehicles, especially those with AGM batteries or smart charging systems, regularly charge at 14.7V or even slightly higher depending on load and temperature.
- Ambient Temperature Is Cold:-In cold weather, higher charging voltages are needed because battery chemical reactions slow down. The regulator compensates by increasing voltage.

⚠ When 14.7V May Be a Concern

- Voltage Remains Constantly High:-If it's always 14.7V regardless of battery state or temperature, the voltage regulator may be faulty.
- You're Using a Standard Flooded Lead-Acid Battery:-Prolonged charging at 14.7V can overcharge standard lead-acid batteries, causing electrolyte loss and damage.
- Battery Is Getting Hot or Swelling:-Signs of overcharging. Voltage should be reduced by the regulator once the battery reaches full charge.

🔧 General Rules

- Normal alternator voltage range: 13.8V – 14.8V
- Charging over 15.0V = too high, likely a faulty regulator.
- Charging under 13.5V (engine running) = too low, possible alternator or belt issue.