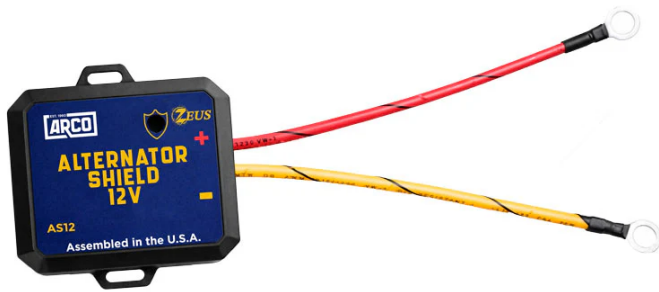


The ARCO Zeus Alternator Shield

The ARCO Zeus Alternator Shield is engineered to protect high-output alternators from damaging voltage spikes caused by sudden battery disconnect events. These events, commonly triggered by lithium battery BMS shutdowns or accidental switch interruptions, can instantly destroy alternator diodes. The Shield clamps excess voltage and safely diverts it to ground, helping extend alternator life and prevent costly failures.

KEY BENEFITS

- Protects Against Voltage Spikes – Prevents damage caused by battery disconnects and load dump events
- Designed for Modern Electrical Systems – Ideal for lithium battery systems with BMS shutoff risk
- Extends Alternator Life – Reduces stress on diodes and internal components
- Real-Time Status Indication – LED indicator provides instant health status
- Easy Installation – Installs directly at alternator terminals in minutes
- Built for High Output Systems – Engineered to perform with today's high-amperage alternators



Available Models

- AS12 – 12 Volt** : 18V – 60V Alternator Protection
- AS24 – 24 Volt** : 30V – 90V Alternator Protection

Physical Specifications (both models)

- Dimensions: 2 × 0.6 × 2 in (50 × 16 × 50 mm)
- Waterproof Rating: IP68

Installation Instructions

1. Both Shield ring terminals should be placed on the top of the ring terminal stack on the alternator posts. Do not place them under the battery connections.
2. Connect the ring terminal of the red and black wire to the alternator battery positive post.
3. Connect the ring terminal of the yellow and black wire to the alternator ground post.
4. Check the Shield status LED:
 - **GREEN** = Shield is connected correctly and will provide protection.
 - **RED** = Shield no longer provides protection and must be replaced.

Note: The Shield is rated to the automotive ISO 16750-2 Load-Dump Surge specification. All surge protection devices will eventually fail if the surge is extreme enough. If the limits of the shield are exceeded, the status LED will turn **RED**, and it will need to be replaced. In circumstances like a lightning strike, the Shield may become damaged, stop providing protection and not show a **RED** LED. This also indicates the Shield needs to be replaced.