

## Installation, Charging and Care of Varley Red Top Race and Rally AGM Lead Acid Batteries

### Installation

Varley Red Top lead acid batteries can be installed in any orientation, but inverted should be avoided. The use of padding around the battery will protect it from damage and dampen any potentially hazardous vibration. Our battery mounting brackets come complete with 10mm thick closed cell padding. Foam padding over the red vent panels should be avoided. Over-tightening of restraints and clamps holding the battery in place could reduce the effectiveness of the padding and damage the battery. Avoid using narrow battery straps across the top of the battery as they can apply uneven pressure.

### Connecting Cables to Battery Terminals

The terminals of our batteries are tin plated brass to provide the maximum current flow. **Please note the maximum torque specified on the battery label when connecting to the terminals – DO NOT OVERTIGHTEN OR STRESS THE TERMINALS.** Always ensure that cables are supported so they do not add any mechanical strain to the terminal posts.

**Varley Red Top batteries are safe to use with external, 12V engine jump-start packs as long as the correct operating procedure is followed.**

### Charging and Care of Varley Red Top Batteries

We recommend charging your battery after purchase to ensure maximum performance. Before storing your battery for an extended period of time, ensure it is fully charged. After the battery is used, recharge immediately. Some cars have equipment that continues to draw power when the engine is switched off. To avoid the battery going into a deep discharge state from which it may not be recoverable, switch off or disconnect all loads.

### Charging On the Vehicle

The use of alternators for charging Varley Red Top batteries is actively encouraged. The alternator voltage should be regulated to 14.4v (at 25°C). Please note that if the battery is located very close to a heat source (exhaust, etc), the elevated temperatures could increase the rate of charge, and decrease the life of the battery.

### Mains Charging

DMS technologies offers a range of lead acid battery chargers designed to maximise the life and performance of your Varley Red Top by recharging them quickly, efficiently and safely. All DMS chargers can be left connected to Varley Red Top batteries without incurring damage to either product.

“Boost” chargers, which have an unregulated voltage, **must not be used on** Varley Red Top batteries as they will cause the battery to fail.

### Monitoring Battery State of Charge

You should leave a battery for at least 6 hours after recharging before taking a voltage reading to gain an accurate result. The table opposite gives an indication of a batteries state of charge.

Approx Capacity %	Open Circuit Voltage
100	13.00
75	12.70
50	12.40
25	12.10
0	11.80

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