

Banner “Energy Bull” batteries warranty information

We guarantee Banner batteries (supplied by RoadPro and used for leisure purposes) against manufacturing defects resulting in mechanical failure for a period of three years.

NOTE: This does not mean that your battery will not need replacing for three years. The useful lifetime of a battery depends entirely on how it is used and maintained. Please read the notes below.

When used as intended and maintained correctly, it is very, very rare for a good quality battery to suffer mechanical failure within the period of the warranty. Exactly how long a battery can be used for depends on how it is used and how it is maintained when it is not being used. However, if it is not used or maintained in the appropriate way, any lead-acid battery can be easily damaged, resulting in poor performance and / or premature failure. This warranty does not cover damage to a battery which has been caused as a result of such inappropriate use including the following actions. Please note that this is not an exhaustive list.

- **Overcharging** – Charging at an excessively high voltage can result in “gassing”. The effect of this is to lower the level of the electrolyte, exposing the plates to air and damaging them. Overcharging can also occur when a battery is permanently connected to a solar panel or a battery charger.
- **Undercharging** – This will result in sulphation of the plates and only occurs when a battery is not kept fully charged. It’s possible to reverse the adverse effects of mild sulphation using an “intelligent” battery charger but, the longer it’s left in a discharged state, the harder it is to recover a battery. Sulphation can result in an inability of the battery to hold a charge and, in severe cases, short-circuiting of the plates.

Stratification is another result of undercharging and is often seen in batteries that are used infrequently. Because the acid in the battery has a lower specific gravity than water, it can, if the battery is not used, separate out from the water and sink to the bottom of the battery. This higher concentration of acid at the bottom of the battery causes additional build-up of lead sulphate (sulphation), which reduces battery storage capacity and battery life. In order to prevent battery stratification, an equalization charge (increasing charging voltage to 14.4 volts) must be applied periodically.

- **Excessive discharging** – A wet lead-acid battery should never be discharged below 50% of its stated Amp-hour capacity. If this is done on a regular basis, the battery’s performance will deteriorate and its life will be greatly shortened.
- **Excessive cycling** – Any lead-acid battery has a finite life which is often measured in cycles. Cycles are the number of times that a battery is charged and discharged. A Banner Energy Bull battery is a semi-traction type and, if used correctly, has a cycle life of up to 400 - 500 charging cycles at 50% state of charge. If it’s discharged to 25% state of charge, the cycle life will be reduced and, if discharged to only 75% state of charge, it will be increased.
- **Damage caused by incorrect connection of a battery charger** – If a charger is connected incorrectly, positive to negative and vice versa, the result can be that the polarity of the battery is switched so that the negative pole becomes positive and the positive pole becomes negative.

When we send a Banner Energy Bull battery out to a customer, the battery was almost certainly manufactured within the past 6 months and we make sure that it is almost fully charged and reading at least 12.6V.

In order to get the maximum performance and life from a battery, it’s essential that it’s properly maintained and this is best done with the use of an “intelligent” battery charge such as those made by CTEK, Votronic, Sterling Power and Waeco. Please look at our website for more information on battery chargers and charging.

Please Note: In the event of a warranty claim, batteries must be returned to our Daventry premises or to Banner Batteries in Rugeley, Staffordshire for assessment.