MXS –ALTERNATOR BOOSTER REGULATOR

Higher current output demands at lower alternator RPM are becoming increasingly common. This frequently requires the use of a special ***high power alternator*** regulator. The MXS alternator regulator,offers this, and many other facilities, e.

***Why the requirement for increased low speed power*?**

In many vehicles, high power is drawn from the 12V (or 24V) system, especially when the vehicle is being driven at a low speed – such as driving through the South African Bush. A typical example is when the current drawn from the battery can be as high as 150A - while the alternator is only producing about 50A - due to the low rotational speed of the alternator. The battery will support the load only until the stored energy runs out.

WHY 3 STAGE CHARGING? The ***special alternator regulator*** delivers an increase in available energy which often goes hand-in-hand with charging batteries more frequently, and more intensively.

THE DISTINCTION Practically all 12V or 24V alternators, which are supplied with a propulsion engine by the manufacturer, are intended for charging starter batteries. The maximum charging current is often limited to 50 / 60A, whilst the voltage has been adjusted to a 'float' charging voltage. This is a good point of departure for the starter battery, but not effective for charging auxiliary batteries.

OTHER DEMANDS The comparison on the following page shows the difference between the normal application of an alternator, and a typical 4 X 4, or leisure application.

Aspect	Car	Typical 4X4 User or Leisure Vehicle
Use of engine	Long	Often short
Battery discharge	Only when starting	Often heavy discharge, continues load
Battery size	Small	Large or more than one
Energy production	Limited	Has to be high because of short charging time
Dimensions & weight	Small & light	Larger & heavier

VARIOUS CHARGING SOLUTIONS

PMP supplies the **MAXAMP** range of High Power alternators and stators, which are optimised by coupling them with the MXS alternator booster regulator. Due to the cycling conditions of the auxiliary battery, the only way to recharge the battery sufficiently, in a short period of time, is to offer increased charge voltage and to thus allow the battery to overcome internal resistance.

MXS Specification Sheet