Description and Operation

The charging system comprises an alternator and regulator assembly which generates current to supply the vehicle electrical system and maintain the battery in a charged condition.

Three types of alternator are used on the Ford Scorpio range, with a variety of power outputs dependent upon engine variant.

- Bosch KC 90 amp (DOHC)
- Magneti Marelli A127I-100 amp (V6)
- Magneti Marelli A127-70 amp (Diesel)

All types of alternator are solidly mounted towards the front of the engine cylinder block and are driven at approximately twice engine speed. Drive belt tension is maintained by a separately mounted automatic tensioner.

All makes are machine sensed which means that a voltage regulator senses the output voltage at the alternator and regulates this to a maximum of approximately 14 volts at all times.

When the alternator is not generating power, with the ignition turned on a warning lamp will illuminate in the vehicle instrument cluster. If, however, there is an open circuit in the regulator or rotor circuit, the warning lamp will not illuminate.

Apart from the regulator and pulley, units should be serviced as an assembly and not dismantled for overhaul.

In certain instances, some alternators may be interchangeable depending upon engine type and territory. Consult the Parts Microfiche for further information.