



# Universal

Specialist in Rotating Electrics



## TECHNICAL BULLETIN 001



### STARTER MOTOR AND ALTERNATOR INSTALLATION NOTES AND TIPS

#### Starter Motor failure stats.

63% of all starter motor failure is due to a faulty battery.

18% of all starter motor failure is due to poor electrical connections, fusible links, bad battery cables and weak grounds. Cable can be tested by verifying that voltage drop doesn't exceed ½ volt from end to end.

7% of all starter failure is due to improper timing and overheating.

5% Incorrect fitment for vehicle specification.

**NOTE:** before installing a starter motor be sure of a fully charged battery.

#### Alternator Failure Stats.

65% of all alternator failure is due to weak or faulty battery.

9% of all alternator failure is due to belt wear or improper adjustment.

16% of all alternator failure is due to poor electrical connections, fusible links, bad battery cables and bad ground cables.

4% of all alternator failure is due to jump starting another car or improperly ( failure to disconnect connections on alternator will cause voltage spikes).

**NOTE:** before installing an alternator be sure of a fully charged battery.

**"With today's vehicles becoming more advanced in technology, it looks like it's a sign of the times"**

### VW TDI 2.5 DIESEL ALTERNATOR FAILURE

We have had feed back on the above vehicle having early alternator failure shortly after fitting the unit, this along with the rubber coupling and clutch pulley gear seizing. This is due to incorrect fitment of the unit. It is vital that the bottom bracket is aligned and tightened before the top brackets. If the top bracket is tightened first this will result in the alternator sitting off set which will cause the alternator to fail. Part numbers that are affected are: **UNA1579** and **UNA1580**.

#### Pictures of Damaged rubber coupling caused by incorrect fitting.



### MERCEDES TECHNICAL SUPPORT

Mercedes A Class and Vaneo vehicles are fitted with two types of starter motor. Although many application guides are only showing the one there are actually two!

Most suppliers are listing the standard type UNS875 but there is another type UNS845 that has a built in micro chip in the solenoid that communicates with the immobiliser on the vehicle. The UNS875 will fit but it will not work, so is not interchangeable because it will not communicate with the immobiliser giving symptoms of a faulty starter motor. The only way to make sure you supply the correct part is to confirm the original Mercedes part numbers off the old unit.