# MOVING PARTS

# **TECHNICAL BULLETIN TB001**

# FORD SMARTCHARGE SYSTEMS

### **PLEASE NOTE**

### **Control Lamp is lit**

If the lamp is lit after fitting the new alternator and the engine is started, the plug or wires connecting the alternator may be faulty. Often, one of the three wires is broken and has been disconnected due to vibrations and engine movements.

## Voltage is too high or unstable

In the event of excessive, or instable, voltage, please check the sensor connection which is best done as follows:

- 1. Unplug the 3 pin plug from the alternator
- 2. Locate the "S" terminal in the plug
- 3. Connect a 10 watt test lamp between "S" and ground. (The lamp should light up)
- 4. Measure the voltage on the "S" terminal while the lamp is connected. It must be exactly the same as the battery voltage. If the voltage is lower than the battery voltage there is a voltage drop in the circuit. Very often, the fuse which supplies "S" is corroded.



Check if the battery is of the silver calcium type – has it been recently replaced? Inspect battery terminals and earth points for corrosion.

Check the continuity of the wiring loom from the alternator to the PCM. Due to the location of the alternator in relation to the PCM, the wiring can become chafed or the insulation melts from being too close to a heat source. This is a common reason when the battery light is illuminated and a new loom will be needed. This is listed for the Ford Connect, part no. 1421293, but can be modified for other models ie. Focus and Mondeo