



TELMA

**SECTION 11
RETARDER CURRENT DRAW CHECK**

The current draw check can be carried out with the Telma Retarder connected to the vehicle harness.

This test establishes whether the electrical function of the retarder is satisfactory.

Any difference found in the readings compared to the current draw in the Specifications will generally result in a reduced performance of the retarder. It will also be an indication of a breakdown of the cable harness or a short circuit.

Voltage must be measured between the Relay Box earth and positive feed whilst the current draw on each stage is measured. If possible, keep the engine running during these tests and recharge the batteries if the voltage is not at least the desired voltage of 12 or 24 volts.

Use an ammeter with range: 15<A<100 (or use amp shunt)
voltmeter range: 12<V<30

Avoid using long cables for current measurement.

Measure the current draw on each stage.

There are several methods of measuring current draw.

One method is to remove the cable from the Relay Box positive feed, connect the ammeter in series with the cable and the positive terminal, and to close each relay in turn noting the current draw readings.

Alternatively, it is possible to keep all the cables connected and to connect the ammeter between the Relay Box positive terminal and each relay power terminal (I, II, III and IV) in turn. Caution should be exercised as this will immediately energise the retarder with quite substantial current flows occurring. The current draw for each stage can be measured.

**SECTION 12
RETARDER RESISTANCE CHECK**

Disconnect the Telma Retarder from the vehicle harness.

Use an Ohmmeter with a sensitivity of 0.01 Ohms - preferably a digital meter.

Measurements must be taken stage by stage directly from the retarder terminal block and retarder earth terminal. This is to avoid any other resistance such as cables, connectors etc.