

RETARDER SYSTEM DIAGNOSTICS

**RELAY BOX CONTACTS CLOSING
BUT
REDUCED RETARDER PERFORMANCE**

- CHECK Retarder current draw

LOW CURRENT DRAW

- CHECK Voltage between Earth Terminal (M) and Positive Terminal in Relay Box

ZERO VOLTAGE

LOW VOLTAGE

CORRECT VOLTAGE

- CLOSE each set of contacts in turn
- CHECK voltage at terminals I,II,III and IV

ZERO OR LOW VOLTAGE

CONTACTS MAY REQUIRE REPLACING

- CHECK each set of contacts and replace
- CHECK other relay box parts - diodes etc

HIGH CURRENT DRAW

- CHECK for short circuits in power cable
- CHECK Resistance of Retarder circuits
- CHECK Resistance of coils in faulty circuits
- CHECK Insulation resistance of coils and internal looms is greater than 1 MΩ

**COIL OR INSULATION RESISTANCE
NOT AS SPECIFICATION**

COIL OR LOOM MAY REQUIRE REPLACING

- CHECK Battery fuse and connections
- CHECK Battery terminals
- CHECK Earth connections
- CHECK Relay Box connections

- CHECK Relay Box connections
- CHECK Battery connections
- CHECK Battery condition
- CHECK Alternator charging rate

CORRECT VOLTAGE

- CHECK Cable from Relay Box to Retarder
- CHECK Earth Cable from Retarder to Earth
- CHECK Condition of Earth connection
- CHECK Resistance of Retarder circuits
- CHECK Resistance of coils in faulty circuits

COIL RESISTANCE NOT AS SPECIFICATION

COIL OR LOOM MAY REQUIRE REPLACING