



AUTOELECTRO

Since 1986

STARTER MOTORS & ALTERNATORS

Please note if you are experiencing flat battery problems and a 3.5amp discharge is present most commonly this is due to the regulator/smart charge system is not shutting down. This is normally caused by a break in the wiring loom or poor connection on the RC terminal to the alternator

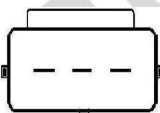
We have come across reports that after fitting a replacement alternator the battery warning light is staying on and/or the alternator is overcharging. This alternator is operated through a smart charge system, if the battery being used on the vehicle is standard lead type battery and not the recommended silver calcium then the alternator will not function correctly. The battery voltage should be around 13.8v.

Checking the smart charge system

A/S = Battery Sense (Reference voltage)

LI = Alternator Load request

RC = Alternator Feed Back

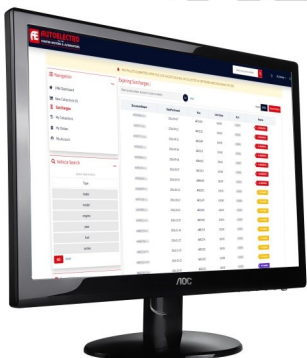


A RC LI

- **A/S pin** Must match the battery voltage. The feed is from the central junction box in the engine bay. A high resistance on the fuse contact can cause a voltage drop resulting in the smart charge dropping out.
- **RC and LI Pin** The two pins need checking back to the PCM for resistance by isolation from ground and each other. If this test is ok the you will need to use an oscilloscope for the following tests:-
- **LI Pin** This pin requests the load from the PCM to the alternator. This will be a square wave pattern that will change with load request. Switch on lights, heaters etc for this test back probing with the plug connected. If there is no change in the patterns this would indicate a possible PCM fault.
- **RC Pin** This pin is the feedback from the alternator and must remain in a constant square pattern. If the pattern mirrors the SIG pin pattern this would indicate a possible alternator fault.

Ensure the battery is fully charged before fitment of the alternator and do not under any circumstances jump start the vehicle. This alternator can run up to 18v and by jump starting you can damage alternator components.

FREE vehicle specific technical information available at autoelectro.co.uk



Vehicle specific information is available by searching the vehicle details via our website or scanning this QR code



Fit and Forget!