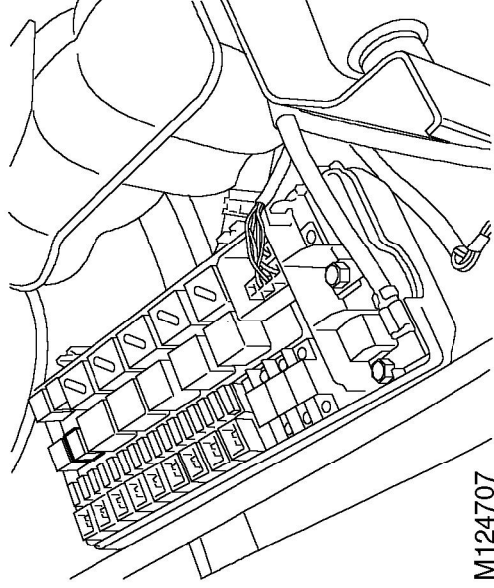




ENGINE MANAGEMENT SYSTEM - V8

ATC compressor clutch relay



M124707

The ATC compressor clutch relay is located in the engine compartment fuse box. It is a four pin normally open relay. The relay must be energised to drive the ATC compressor clutch.

Input/Output

The ECM provides the earth for the relay coil for the relay contacts to allow the relay contacts to close and the ATC clutch drive to receive battery voltage. The ECM uses a transistor as a switch to generate an open circuit in the earth path of the relay coil. When the ECM opens the earth path, the return spring in the relay will pull the contacts apart to shut down the ATC clutch drive.

Input to the ATC clutch relay switching contacts is via fuse 6 located in the engine compartment fuse box. The relay coils are supplied with battery voltage from the main relay, also located in the engine compartment fuse box. The earth path for the relay coil is via pin 29 of the ECM C0657 connector. When the relay is energised the output from the switching contacts goes directly to the ATC compressor clutch.

The ATC clutch relay can fail in the following ways:

- Relay open circuit.
- Short circuit to vehicle supply.
- Short circuit to vehicle earth.
- Broken return spring.

In the event of an ATC clutch relay failure, the ATC does not work.

Should a malfunction of the component occur, the following fault codes may be evident and can be retrieved by TestBook.

P Code	J2012 Description	Land Rover Description
P1536	Air conditioning compressor request range/performance	ATC compressor clutch relay open circuit
P1537	Air conditioning compressor request low input	ATC compressor clutch relay short to earth
P1538	Air conditioning compressor request high input	ATC compressor clutch relay short to battery supply