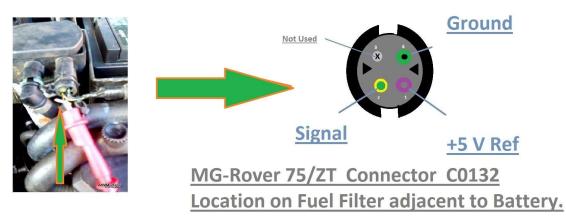
Low Pressure Fuel Pressure Sensor M47R Diesel Rover 75, MG ZT & Land-Rover Freelander 1 TD4





Tools Required: Good digital multimeter DVOM or Oscilloscope. Dressmaker Pin or Paper Clip.

Sensor Type: Normal 3 wire pressure sensor works, 5v supply from ECU

This test should provide a quick method of determining if a cranking non-start on a Rover 75 or MG ZT or Freelander 1 fitted with BMW M47R diesel engine is due to an in-tank or engine bay fuel pump issue without using a scantool.

Before start test the Voltmeter used should be set to a suitable DC Voltage range normally for automotive work 0 to + or - 20 volts is suitable. The sensor is powered by a 5v reference supply from the engine computer. As long as the technician takes care to set the meter to measure voltage and dosen't short the sensor to ground no damage will be done to the sensor or engine computer.

(1) Attach the Black wire of the meter to a suitable ground – battery negative or Webasto heater or any metal part on the cylinder block.

(2) Test your meter by touching the Red test lead to the + terminal of the battery it should read somewhere between 11.5 and 13 volts.

(3) Turn the ignition key to the run position.

(4) Using a suitable pin back probe the position on the connector occupied ground wire - this should give voltage reading within a few mV of 0 volts. This will prove the sensor has a good ground.

(5) Remove the pin and insert it into position occupied by the 5v reference supply this should read very close to 5.00v This proves the 5v ref supply is good and your meter is properly grounded.



(6) Remove the pin and insert it into position occupied by the signal output this should read in the range 3.85 to 4.1 volts.

(7) Remove pin and disconnect meter & turn off ignition.



Below is the test of a known good running vehicle at start up to engine running and switch off captured using an oscilloscope note running voltage is close to 4 volts.

