

Testing MAP sensor from Helm Manual

A faulty MAP sensor will give you a code "3" when you pull fault codes. Testing is covered on page 5-28 and 5-29 of the Helm shop manual.

Basic procedure follows:

Disconnect 3-prong connector to MAP sensor.

Turn on key switch

Voltmeter + to brown/yellow prong on harness side and voltmeter - to ground. Should read 4.75 to 5.25 volts.

If not, then voltmeter + to pin 13 on the 26 pin connector to the ECU and voltmeter - to pin 9 on the 34 pin connector to the ECM. (You need to carefully back probe these wires if you are going to try this.) Turn on key switch. You should read 4.75 to 5.25 volts there. If not, replace ECM.

If you get the proper voltage on the Br/Y wire in the first step, then with key switch on, voltmeter + to brown/yellow prong and voltmeter - to green/red prong. Voltage should be 4.75 to 5.25.

If not, there is a break in the G/R wire from the ECM.

If you get that voltage, then voltmeter + to white/red prong and voltmeter - to green/red prong. Again you should read 4.75 to 5.25. If not, then there is a break or short in the W/R wire to the ECM

If you do get the proper voltage between W/R and G/R then the last step is to turn off the key switch, reconnect the 3-pronged MAP connector, back probe the 34 pin connector to the ECM with voltmeter + to pin 11 and voltmeter - to pin 9. (Now this is strange) If you read 2.76 to 2.96 volts it says to replace the ECM. If not, replace the MAP sensor.