MID AMERICA MOTORWORKS

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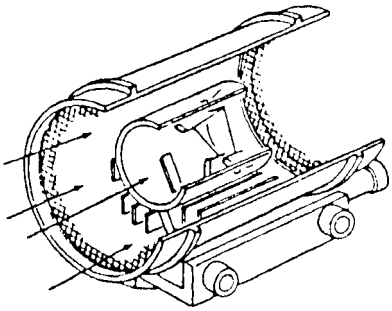
Suggested Installation Instructions for:
601-096, Mass Air Flow Sensor Test Tool

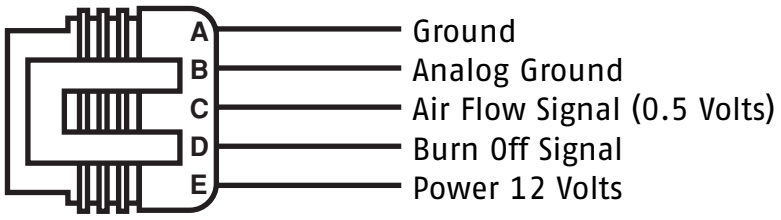
INTRODUCTION:

The Mass Air Flow Sensor (MAF) is a form of "hot-wire anemometer" that measures air volume and density. It produces a frequency output. A constant voltage source is applied to the hot wire. The wire has a positive temperature co-efficient meaning, that as it gets hotter its resistance increases. The incoming air tends to cool the wire, lowering its resistance thereby increasing the current. Hot dry air, being less dense (and having less mass), cools it less than cool moist air that is more dense (and has more mass). The greater the air masses passing the hot wire the greater the current flow. A circuit mounted on the top of the MAF sensor converts the current flow into a square wave whose frequency changes depending on the mass of the air flow.

INSTALLATION AND TEST PROCEDURES:

1. With ignition switch "OFF", disconnect the ECM connector from the Mass Air Flow Sensor. Refer to the GM Shop Manual for sensor location.
2. Plug in the MAS-1 Test Tool connector into the Mass Air Flow Sensor. Plug the MAS-1 Test Tool pins into the ECM connector. Take care to insure each pin location on the MAS-1 coordinates with the same pin location on the ECM connector, i.e., A to A, B to B, C to C, etc. Stamped on the connector body are letters A through E. **CAUTION: DO NOT** reverse the pin configuration. **DO NOT** force test jumper into connection. Damage to pins or sensor may result. **DO NOT** allow pins to touch. Carefully move test jumper from side to side to align pins into place.
3. Take voltage measurements by using a digital voltmeter (10 megaohm impedance required) by touching the MAS-1pins. The ignition switch may be on or off depending on the type of test.
4. Voltage may vary depending on make and model. Refer to the GM Shop Manual for proper voltage readings.
5. Remove the MAS-1 Test Tool and re-connect the ECM connector to the Mass Air Flow Sensor.





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