MAF Sensor Diagnosis

Meets NATEF Task: (A8-B-7) Inspect and test sensors, actuators, and circuits using a graphing multimeter (GMM)/digital storage oscilloscope (DSO); perform necessary action. (P-2)

Name _____ **Date** _____ **Time on Task** _____

Make/Model/Year _____ **VIN** _____ **Evaluation: 4 3 2 1**

A "*M*ass *A*ir *F*low" sensor produces a variable output depending on the MASS of the air flow through the sensor. A faulty MAF can cause driveability problems and stalling. A good MAF sensor should produce a signal that increases with engine speed.

_____ **1.** Check service information for the specified procedure to follow to test the MAF sensor.

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_____ **2.** Use a meter or scope with a frequency counter to record frequency or voltage at idle and at WOT (short bursts).

at idle = _____ at WOT = _____

_____ **3.** Use a scan tool and record grams per second.

at idle = _____ at WOT = _____

A good MAF should read:

- greater than 100 grams per second (scan tool diagnosis)
- higher than 7000 Hertz (7 KHz) (digital MAF)
- higher than 4 volts (analog MAF)

_____ **4.** If the MAF sensor reading does not exceed these values, the sensing wire may be contaminated or the sensor itself is defective.

_____ **5.** Based on the test results, what is the necessary action? _____

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