MAF Sensor Scope

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-1)

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

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

Most mass air flow sensors produce a variable frequency signal or voltage proportional to the amount (mass) of air flowing through the sensor.

_____ **1.** Check service information and determine the voltage (analog MAF sensor) or frequency (digital MAF sensor) range for the unit on the vehicle being tested.

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_____ **2.** Set the scope to 2ms/div and 200 mV/div.

_____ **3.** Locate the MAF sensor and connect the scope probe to the signal wire on the sensor by carefully back probing the connector.

_____ **3.** Connect the scope probe ground lead to a good non-painted engine or body ground.

_____ **4.** Draw the MAF sensor signal at idle speed with the engine in neutral or park.

_____ **5.** Place the gear selector in drive or reverse (automatic transmissions only) and draw the MAF sensor signal.

_____ **6.** What difference did you notice? _____

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_____ **7.** Based on the test results, what is the necessary action? _____