TP Graph Test

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**

The engine computer supplies a 5 volt reference voltage to the variable resistance throttle position sensor. At idle, the throttle position voltage as measured by the output of the TP sensor should be about 0.5 volt and about 4.5 volts when the throttle is in the wide open position.

_____ **1.** Carefully back probe the signal terminal of the TP sensor using a T-pin.

_____ **2.** Connect the red lead of a digital meter set to read DC volts to the T-pin and the black lead to a good chassis ground.

_____ **3.** Turn the ignition switch to on (engine off) and record the TP voltage at idle, ¼ throttle, ½ throttle, ¾ throttle and wide open throttle (WOT).

Idle **¼** **½** **¾** **WOT**

_____ **4.** Place a dot at each point on the graph at idle, ¼, ½, ¾, and WOT. Connect the dots. The results should be a straight line.

OK _____ **NOT OK** _____

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

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