Oxygen Sensor Diagnosis

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

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

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

_____ **1.** Connect the scan tool to the DLC and start the engine.

_____ **2.** Operate the engine at a fast idle (2500 RPM) for 2 minutes to allow time for the oxygen sensor to warm to operating temperature.

_____ **3.** Observe the oxygen sensor activity on the scan tool to verify closed loop operation.

_____ **4.** Select "snap shot" mode and hold the engine speed steady and start recording.

_____ **5.** Play back snap shot and place a mark beside each range of oxygen sensor voltage for each frame of the snap shot.

Between 0 and 300 mV	**Between 300 and 600 mV**	**Between 600 and 1000 mV**
_____	_____	_____
(record # of times)	(record # of times)	(record # of times)

_____ **6.** Results: A good oxygen sensor and computer system should result in most snap shot values at both ends (0 to 300 and 600 to 1000 mV). If most of the readings are in the middle, the oxygen sensor is not working correctly.

OK _____ **NOT OK** _____

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

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