

Exhaust Gas Analysis

Meets ASE Task: (A8-A-1) P-1 Prepare 4 or 5 gas analyzer; inspect and prepare vehicle for test, and obtain exhaust readings; interpret readings, and determine needed action.

Name _____ Date _____ Time on Task _____

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

_____ 1. Check the instruction information for the exhaust gas analyzer being used to determine the proper test procedures to follow.

_____ 2. Check the vehicle for exhaust leaks and other faults that could affect the exhaust gas readings.

_____ 3. Prepare the vehicle for testing, which usually includes operating the engine until normal operating temperature has been achieved. List other items listed by the test equipment manufacturer that should be performed.



_____ 4. Obtain the exhaust gas readings and compare them to specifications.

Gas	Idle	2500 RPM	General Specifications
HC			Max 50 PPM
CO			Max 0.5%
CO ₂			12% to 15% or higher
O ₂			0% to 2%
NO _x			Less than 100 PPM @ idle Less than 1000 PPM @ wide open throttle

_____ 5. Based on the exhaust gas readings, what is the needed action?