



ASE P2 Quiz: Exhaust System



What is the most dangerous and poisonous pollutant in a vehicle's exhaust?

1. Which component in the exhaust system is attached to the cylinder head?
 - a. Head pipe
 - b. Exhaust pipe
 - c. Exhaust manifold
 - d. Y-pipe
2. Counterman A says front-wheel drive cars may have a "flexible" head pipe to accommodate engine vibrations and twisting motions. Counterman B says "Y-pipes" are only used on four cylinder engines. Who's right?
 - a. Counterman A only
 - b. Counterman B only
 - c. Both Counterman A and B
 - d. Neither one
3. Which of the following is the most dangerous and poisonous pollutant in a vehicle's exhaust?
 - a. Carbon dioxide (CO₂)
 - b. Carbon monoxide (CO)
 - c. Oxides of Nitrogen (NO_x)
 - d. Hydrocarbons (HC)
4. The catalytic converter is usually located where?
 - a. Between the manifold and engine
 - b. Between the manifold and muffler
 - c. Between the muffler and tailpipe
 - d. Between the exhaust pipe and tailpipe
5. How many catalytic converters would a vehicle with a "Y-pipe" likely have in its exhaust system?
 - a. One
 - b. Two
 - c. Three
 - d. Four
6. A "universal" replacement muffler may require:
 - a. Cutting existing pipes
 - b. Pipe adapters
 - c. New clamps and hangars
 - d. All of the above
7. An "Exact Fit" replacement muffler eliminates the need for:
 - a. Clamps
 - b. Heat shields
 - c. Gaskets
 - d. Pipe adapters
8. A "resonator" does what?
 - a. Helps reduce emissions
 - b. Helps dampen vibrations
 - c. Helps muffle noise
 - d. Helps reduce backpressure
9. All of the following elements may be used as catalysts inside a three-way catalytic converter EXCEPT:
 - a. Titanium
 - b. Platinum
 - c. Palladium
 - d. Rhodium
10. Counterman A says a "cat back" exhaust system usually includes a new Y-pipe, intermediate pipe, muffler and tailpipe. Counterman B says a cracked exhaust manifold can be repaired with a new gasket. Who's right?
 - a. Counterman A only
 - b. Counterman B only
 - c. Both Counterman A and B
 - d. Neither one

ANSWER KEY

1c, 2a, 3b, 4b,
5a, 6d, 7d, 8c,
9a, 10d