

Automotive Technology 7<sup>th</sup> Edition  
Chapter 82: Catalytic Converters  
Short Answer Quiz

Name:

Date:

1. What are the three most commonly used catalyst materials in a catalytic converter, and what is their role?
2. Explain the process by which a catalytic converter reduces NO<sub>x</sub> emissions into nitrogen and oxygen.
3. Why is it necessary for a catalytic converter to be mounted close to the exhaust ports of the engine?
4. Describe how the computer (PCM) monitors catalytic converter performance.
5. What are the different tests a service technician can perform to evaluate the condition of a catalytic converter?

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6. Discuss the impact of a rich or lean exhaust mixture on the efficiency of a three-way catalytic converter.

7. At what minimum temperature does a catalytic converter start to function effectively?

8. What two primary sensors does the PCM use to check the catalytic converter, and how do they work?

9. What substances can harm a catalytic converter, and through what mechanisms do they cause damage?

10. How is back pressure tested in a catalytic converter using a pressure gauge, and what are the acceptable pressure readings at idle and 2,500 RPM?