

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. For the most efficient operation, the catalytic converter should have what air–fuel ratio?
  - A. Exactly 14.7:1
  - B. Slightly richer than 14.7:1
  - C. Slightly leaner than 14.7:1
  - D. Any of the above as long as it is close to 14.7:1
  
2. What can cause a catalytic converter to become a "catalytic furnace" and potentially get damaged?
  - A. Long idling periods
  - B. Excessively rich mixtures
  - C. Engine misfiring
  - D. All of the above
  
3. What is the purpose of cerium in many modern catalytic converters?
  - A. To act as a primary catalyst
  - B. To store oxygen for the oxidation bed
  - C. To increase the surface area of the catalyst
  - D. To reduce the light-off temperature
  
4. What is the warranty period for a catalytic converter under federal regulations?
  - A. 8 years or 80,000 miles, whichever comes first
  - B. 10 years or 100,000 miles, whichever comes first
  - C. 5 years or 50,000 miles, whichever comes first
  - D. 3 years or 36,000 miles, whichever comes first
  
5. After replacing a catalytic converter, how long must the old converter be kept for possible inspection?
  - A. 30 days
  - B. 60 days
  - C. 90 days
  - D. 120 days
  
6. What is the correct procedure for a tap test on a catalytic converter?
  - A. Tapping with a rubber mallet to listen for rattles
  - B. Tapping with a metal hammer to check for solidity
  - C. Applying a magnetic field to check for metal degradation
  - D. Using an ultrasonic tester to detect internal fractures
  
7. What should the pressure reading be at 2,500 RPM when testing for back pressure in a catalytic converter?
  - A. Less than 1.5 PSI (10 kPa)
  - B. Less than 2.5 PSI (15 kPa)
  - C. Less than 3.5 PSI (20 kPa)
  - D. Less than 4.5 PSI (30 kPa)

8. What is the effect of a restricted exhaust system on engine vacuum at 2,500 RPM?
- A. The vacuum reading is equal to or higher than at idle speed
  - B. The vacuum reading is lower than at idle speed
  - C. The vacuum reading fluctuates rapidly
  - D. The vacuum reading remains constant regardless of RPM
9. What is the required exhaust mixture for the reduction process in a catalytic converter?
- A. Rich
  - B. Lean
  - C. Stoichiometric
  - D. None of the above
10. What should be done with the form completed after catalytic converter replacement?
- A. Kept on file for one year
  - B. Kept on file for two years
  - C. Submitted to the EPA immediately
  - D. Displayed in the service facility

Automotive Technology 7th Edition

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Multiple Choice Quiz B

Answer Key

1. A

2. D

3. B

4. A

5. B

6. A

7. B

8. B

9. A

10. B