

Automotive Technology 7<sup>th</sup> Edition  
Chapter 74: Fuel Pumps, Lines, and Filters  
Short Answer Quiz

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

1. Describe the design features of a turbine impeller in a fuel delivery system and explain how it minimizes pump harmonic noise and vapor from liquid fuel.

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2. What is the function of the pressure relief valve and the RFI suppression module in the end cap assembly of a fuel delivery system?

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3. Explain the role of the check valve in the upper fuel pipe connector assembly and how it contributes to the fuel delivery process.

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4. Discuss the importance of using materials with high resistance to oxidation and deterioration for fuel-injection hoses, and why spring-type clamps are not suitable for these systems.

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5. What are the specific requirements for fuel-injection fittings and nylon lines to ensure leakproof connections, and how do they differ from other types of fuel system fittings?

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6. Describe the purpose of the fuel tank pressure sensor and its role in the evaporative fuel control system.

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7. Explain the function of the jet pump in the modular fuel sender assembly and how it contributes to minimizing the possibility of vapor lock.

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8. How do electric pump control circuits ensure safety and proper pressurization of the fuel system upon ignition and during engine operation?

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9. What are the different types of electric fuel pumps mentioned in the document, and how do they operate to move fuel through the system?

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10. Discuss the onboard refueling vapor recovery (ORVR) systems and how they have been developed to reduce evaporative emissions during refueling.

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