Light Vehicle Diesel Engines, 1st Edition Chapter 12	
Name	
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.	
1) Why is a fuel cooler needed on high-pressure fuel injection systems?	
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2) What is wrong if the amount of return fuel is greater than specified?	
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3) What is the purpose of the low-pressure fuel system?	
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4) What is the purpose of the fuel system heater?	
5) How is it possible for gasoline or E85 to be added to a diesel fuel tank?	

Answer Key

Testname: LVDE1_SHORT12

- 1) Most fuel systems that use a high-pressure injection system incorporate a fuel cooler in the low- pressure return line prior to the fuel tank. A high-pressure fuel injection system generates significantly more heat than the low-pressure fuel injections used on older models. The cooler regulates the fuel temperature and controls the density of the fuel. Page Ref: 138
- 2) An increase in the volume of fuel being returned to the tank can indicate a mechanical wear problem with the injectors or the high-pressure pump.

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3) The low-pressure fuel system is designed to store fuel until it is needed, and deliver it to the high- pressure system at the correct pressure and in an adequate volume.

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- 4) Many manufacturers incorporate a fuel heater into a filter housing to prevent fuel from gelling in cold weather. On a dual-filter system, this heater is in the secondary filter housing Page Ref: 138
- 5) Unleaded gasoline nozzles are smaller than those used for diesel fuel to help prevent fueling errors. However, it is still possible to fuel a diesel vehicle with gasoline or E85.

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