Light Vehicle Diesel Engines, 1st Edition Chapter 21
Name
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.
1) What are the three methods that can be used to reprogram a PCM?
2) What are three things that should be checked as part of a thorough visual inspection?
3) What is the procedure to follow when diagnosing a vehicle with stored DTCs using a scan tool?
4) Why should a search of technical service bulletins be performed after stored DTCs are retrieved?
5) Why is it necessary to use a special battery charger when reflashing a PCM?

Answer Key

Testname: LVDE1_SHORT21

- 1) The three methods that can be used to reprogram and PCM include:
 - 1. Direct programming
 - 2. Off-board programming 3. J2534 programming

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- 2) The inspection should include the following:
 - Check the oil level, color of the oil, and smell to determine if there may be diesel fuel in the oil. Higher-than-normal oil level can indicate that diesel fuel has leaked into the oil.
 - Unusual noises, smoke, or smell should be noted.
 - Check the air cleaner and air duct (squirrels and other small animals can build nests or store dog food in them).
 - Check for oil or fuel leaks.

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3) Always follow service information published procedures for any stored DTCs.

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4) Many technical service bulletins reference stored DTCs so these need to be checked before performing a bulletin search.

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5) Before programming, the vehicle's battery must be between 11 and 14 volts. Do not attempt to program while charging the battery unless using a special battery charger that does not produce excessive ripple voltage, such as the Midtronics PSC-300 (30 amp) or PSC-550 (55 amp) or similar as specified by the vehicle manufacturer.

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