

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) What sensors does the PCM monitor to determine the best camshaft timing?

2) What is the advantage of varying the intake camshaft timing?

3) What is the advantage of varying the exhaust camshaft timing?

4) Why must the engine oil be changed regularly on an engine equipped with variable valve timing?

5) What diagnostic trouble codes are associated with the variable valve timing (VVT) system?

Answer Key

Testname: ENGINEPERF5_SHORT11

1) The PCM monitors all of the following sensors:

RPM

MAP sensor

Crankshaft position (CKP) sensor

Camshaft position (CMP) sensor

Barometric pressure (BARO) sensor

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2) By varying the intake camshaft timing, the engine can be programmed to produce more low speed torque and high-speed power than the same engine that does not have a variable intake camshaft.

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3) By varying the exhaust camshaft timing, the engine will produce less oxides of nitrogen exhaust emissions and improved fuel economy.

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4) All engines should have the engine oil replaced regularly to insure long engine life. However, if the oil is not changed regularly on an engine with variable valve timing, the filter screens or the control valves can easily become clogged. As a result of the screens being clogged, the PCM is not able to successfully control the valve timing and a diagnostic trouble code (DTC) is usually set.

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5) Typical diagnostic trouble codes (DTCs) associated with the variable valve timing system include:

P0011

P0021

P0012

P0022

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