| Automotive Chapter 14 | e Engine Performance, 5th Edition |
|--------------------------|---|
| Name | |
| SHORT A | NSWER. Write the word or phrase that best completes each statement or answers the question. |
| | Why is it important that the READY light be out on the dash before working under the hood of a hybrid electric vehicle? |
| 2) I | How can a thermostat fail? |
| - - - | |
| 3) \ | Why must timing belts be replaced? |
| 4) \ | What will happen to the engine if the intake manifold gasket fails? |
| 5) l | How can a water pump fail requiring replacement? |
| - - - | |
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Answer Key

Testname: ENGINEPERF5 SHORT14

1) If the READY light is on or the ignition is on and the engine is off, it could be in "idle stop" mode. This means that the engine could start at any time without warning.

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- 2) A thermostat can fail in the following ways:
 - Stuck open
 - Stuck closed
 - Stuck partially open
 - Skewed

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- 3) A timing belt should be replaced if any of the following conditions are present:
 - Meets or exceeds the vehicle manufacturer's recommended timing belt replacement interval.
 - The timing belt has been contaminated with engine oil or coolant.
 - The timing belt has failed.

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- 4) If the intake manifold gasket fails, the following may occur:
 - Leaking coolant or oil
 - Coolant level goes down, but no external leaks are found
 - A diagnostic trouble code (DTC) for a lean exhaust condition

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- 5) A water pump can fail in the following ways:
 - Leaking coolant from the weep hole
 - Noisy bearing
 - Loose bearing
 - Not being able to circulate the proper amount of coolant due to worn or slipping impeller blades

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