Automotive Technology 6th Edition
Chapter 33

Name_____

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

1) How is a composite camshaft constructed?

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2) What is needed for an anaerobic sealer to cure?

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3) If an engine at sea level produces 100 horsepower, how many horsepower would it develop at 6,000 feet of altitude?

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4) How can the engine block and cylinder heads be repaired if cracked?

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5) Why is a cooling system pressurized?

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1) Composite camshafts, which use a lightweight tubular shaft with hardened steel lobes press-fitted over the shaft. (The actual production of these camshafts involves placing the lobes over the tube shaft in the correct position. A steel ball is then drawn through the hollow steel tube, expanding the tube and securely locking the cam lobes in position.
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2) Anaerobic sealers cure in the absence of air.
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3) An engine loses 3% of its power for each 1,000 feet above sea level. Therefore, at 6,000 feet, an engine would lose 18% (3 × 6 = 18) or 18 hp. Therefore, if an engine develops 100 hp at sea level, that same engine will produce 82 hp when operating at 6,000 feet altitude.
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4) Engine blocks and cylinder heads can be repaired if cracked by welding or plugging.
Page Ref: 299-300
5) The cooling system is pressurized because under pressure, the coolant boiling temperature is increased.
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