

Name _____

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

1) How is valve stem-to-guide clearance measured?

2) What is a Siamese port?

3) What is meant by the term crossflow head?

4) What are the advantages of using four valves per cylinder?

5) What is the recommended cylinder head reconditioning sequence?

Answer Key

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1) The valve guide is measured in the middle with a small-hole gauge. The gauge size is checked with a micrometer. The guide is then checked at each end. The expanded part of the ball should be placed crosswise to the engine where the greatest amount of valve guide wear exists. The dimension of the valve stem diameter is subtracted from the dimension of the valve guide diameter. Valve stem-to-guide clearance can also be checked using a dial indicator (gauge) to measure the amount of movement of the valve when lifted off the valve seat.

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2) A Siamese port is one port with two shared passages.

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3) A cross-flow head is a design that uses the intake manifold on one side of the engine and the exhaust manifold on the opposite side of the cylinder head.

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4) Four valves per cylinder provide higher velocity and greater volume of intake charge.

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5) The recommended sequence is: 1) Disassemble and clean; 2) Check for cracks; 3) Check the machines surfaces and remachine if needed; 4) Check and service valve guides as needed; 5) Grind valves and assemble cylinder head.

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