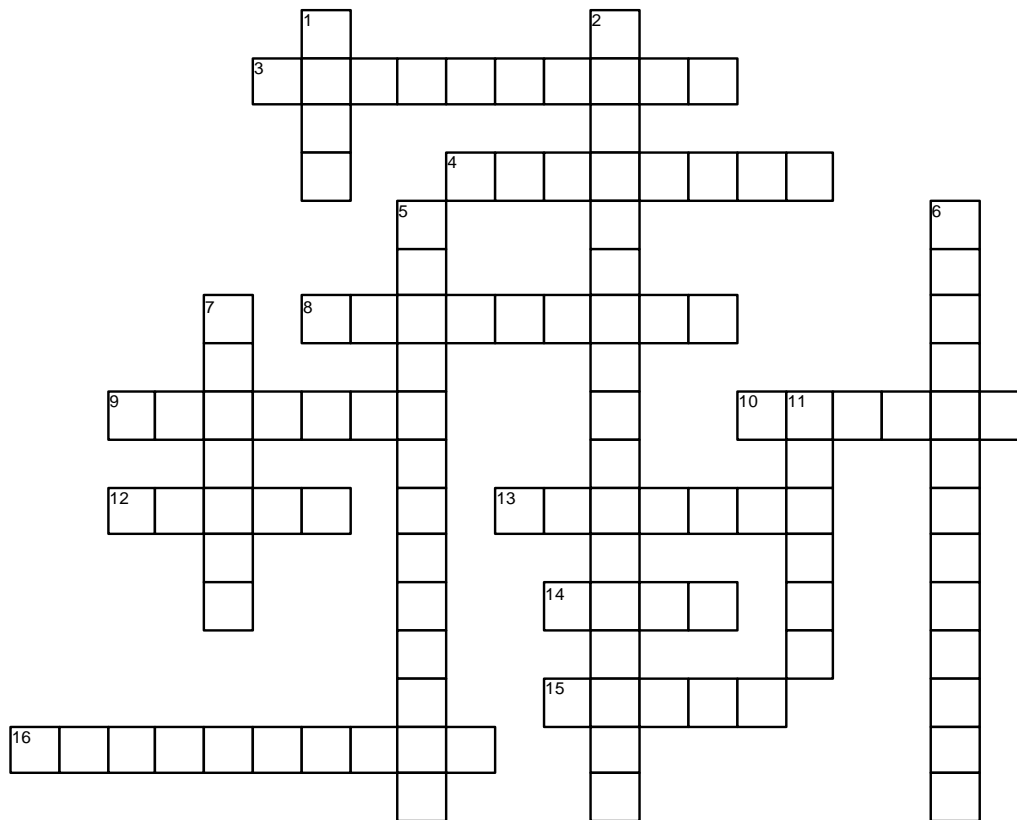


Cylinder Head Inspection

Chapter 27



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ACROSS

- 3 The valve guide supports the valve stem so that the valve face will remain perfectly centered, or _____, with the valve seat.
- 4 Another classification of surface finish, which is becoming obsolete, is called the ____-____-square (RMS). The RMS is a slightly higher number and can be obtained by multiplying RA \times 1.11.
- 8 Removable or pressed-in valve guides and _____ inserts are always used in aluminum heads.
- 9 The head should be checked in five planes. Checking the cylinder head gasket surface with a precision straightedge in five planes checks the head for _____, distortion, bend, and twist.
- 10 _____ area is an area of the combustion chamber where the piston nearly contacts the cylinder head.
- 12 The head should be checked in five planes. Checking the cylinder head gasket surface with a precision straightedge in five planes checks the head for warpage, distortion, bend, and _____.
- 13 On some older engines, two cylinders share the same port because of the restricted space available. Shared ports are called _____ ports.
- 14 The head should be checked in five planes. Checking the cylinder head gasket surface with a precision straightedge in five planes checks the head for warpage, distortion, _____, and twist.
- 15 Removable or pressed-in _____ guides and valve seat inserts are always used in aluminum heads.
- 16 The head should be checked in five planes. Checking the cylinder head gasket surface with a precision straightedge in five planes checks the head for warpage, _____, bend, and twist.

DOWN

- 1 The part of the intake or exhaust system passage that is cast in the cylinder head is called a _____.
- 2 The usual method of expressing surface finish is by the _____ roughness height (ra), that is, the average of the distances of all peaks and valleys from the mean (average) line.
- 5 _____ is the number of degrees by which the crankshaft rotates when the valve is off the valve seat.
- 6 Some domestic vehicle manufacturers that have integral valve guides in their engines recommend reaming worn valve guides and installing new valves with _____ (OS).
- 7 Modifications in the field, such as _____ or relieving, would result in restricting the flow of such a carefully designed port
- 11 The squish area can also be the _____ area where the air-fuel mixture is cooled by the cylinder head.