Automotive Technology 6th Edition Chapter 12
Name
SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.
1) Explain how a micrometer is read.
2) Explain why a dial bore gauge has to be set to a dimension before using.
3) List the gaps or clearances that can be measured using a feeler (thickness) gauge.
4) Describe how to check a crankshaft journal for out-of-round and taper.
5) List engine components that can be measured with the help of a telescopic gauge.

Answer Key

Testname: SHORT 12

- 1) A micrometer uses a screw thread that has 40 threads per inch. Every rotation of the thimble moves the spindle 0.025 in. The spindle is then divided into 25 parts so each line on the spindle represents 0.001 in Page Ref: 106
- 2) A dial bore gauge does not measure a hole, but instead shows how much the bore being measured varies from the preset dimension.

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3) The gaps or clearances that can be measured using a feeler gauge include piston ring gap, piston ring side clearance, and connecting rod side clearance.

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4) To check a crankshaft journal for out-of round, a micrometer should be used to check the diameter in three positions, each 120 degrees apart. To check for taper, measure the journal diameter at two locations. The difference in the two readings is the taper.

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5) The engine components that can be measured with the help of a telescopic gauge include cylinder bore, camshaft bearing diameter, main bearing bore diameter, and connecting rod bore diameter.

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