

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Piston ring end gap can be increased by \_\_\_\_\_. 1) \_\_\_\_\_
  - A) Filing the ring to make gap larger
  - B) Installing oversize rings
  - C) Sleeving the cylinder
  - D) Knurling the piston
  
- 2) Two technicians are discussing the torquing process of head bolts. Technician A says that they should be tightened starting at the center of the head and working toward the ends. Technician B says that they should be tightened in three steps or according to the factory specified manner if torque-to-yield or torque-angle. Which technician is correct? 2) \_\_\_\_\_
  - A) Technician A
  - B) Technician B
  - C) Both technicians
  - D) Neither technician
  
- 3) Technician A says that the back of all engine bearings should be lubricated during assembly. Technician B says that the face of the main and rod bearings should be lubricated before final assembly. Which technician is correct? 3) \_\_\_\_\_
  - A) Technician A
  - B) Technician B
  - C) Both technicians
  - D) Neither technician
  
- 4) Engine pre-oiling is recommended for which of these reasons? 4) \_\_\_\_\_
  - A) Helps the rebuilt engine develop power
  - B) Fills the oil passages with oil prior to initial start-up
  - C) Both A and B
  - D) Neither A nor B
  
- 5) The most common cause of premature bearing failure is \_\_\_\_\_. 5) \_\_\_\_\_
  - A) Misalignment
  - B) Dirt
  - C) No lubrication
  - D) Overloading
  
- 6) What would happen if oil or water (coolant) was at the bottom of a dry hole in the bolt when the head bolts are installed and torqued? 6) \_\_\_\_\_
  - A) Block could crack
  - B) Bolt would break
  - C) Liquid would be forced upward and out of the hole
  - D) Either B or C

- 7) Main bearings and rod bearings should be checked for proper oil clearance by precision measuring the crankshaft journals and inside diameter of bearings, or by using which of these? 7) \_\_\_\_\_
- A) Plastigage material
  - B) Rubber gauging material
  - C) Steel ruler
  - D) Vernier caliper
- 8) Most bolt torque specifications are for \_\_\_\_\_. 8) \_\_\_\_\_
- A) Clean threads only
  - B) Clean and lubricated threads
  - C) Dirty threads
  - D) Dirty threads, but 50% can be added for clean threads
- 9) A engine dynamometer is used to measure engine \_\_\_\_\_. 9) \_\_\_\_\_
- A) Horsepower
  - B) Mass
  - C) Torque
  - D) Weight
- 10) Which of these is TRUE about checking bearing clearances using Plastigage? 10) \_\_\_\_\_
- A) The journal should be clean and oil free
  - B) The cap should be torqued to factory specifications
  - C) The wider the strip means the narrower the oil clearance
  - D) All of the above

## Answer Key

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1) A

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2) C

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3) B

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4) B

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5) B

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6) A

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7) A

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8) B

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9) C

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10) D

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