

Name _____

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

- 1) A hypereutectic piston _____. 1) _____
 - A) Uses about 16% silicon
 - B) Is a cast piston
 - C) Is a forged piston
 - D) Both A and B

- 2) On newer engines the designers try to place the top piston ring as close to the top of the piston as possible. The reason for this is _____. 2) _____
 - A) To reduce HC emissions
 - B) To raise the compression ratio
 - C) To protect the second piston ring
 - D) To reduce the cost of the piston

- 3) The purpose of casting steel struts into an aluminum piston is to _____. 3) _____
 - A) Provide increased strength
 - B) Provide increased weight at the top part of the piston where it is needed for stability
 - C) Control thermal expansion
 - D) Both A and C

- 4) Which type of connecting rod needs to be heated to install the piston pin? 4) _____
 - A) Forged
 - B) Interference fit
 - C) Floating
 - D) PM rods

- 5) Technician A says that if the ring end gap is excessive, blowby gases can travel past the rings and into the crankcase. Technician B says that piston rings usually include three compression rings at the top of the piston and an oil control ring below the compression rings. Which technician is correct? 5) _____
 - A) Technician A
 - B) Technician B
 - C) Both technicians
 - D) Neither technician

- 6) The space behind the piston ring is called _____. 6) _____
 - A) Side clearance
 - B) Forward clearance
 - C) Back clearance
 - D) Piston ring clearance

- 7) Technician A says that replacement pistons can be of different weights from the original pistons. Technician B says that some engines use an offset piston pin to help reduce piston slap when the engine is cold. Which technician is correct? 7) _____
- A) Technician A
 - B) Technician B
 - C) Both technicians
 - D) Neither technician
- 8) The piston pin may also be called a _____ pin. 8) _____
- A) Swivel
 - B) Wrist
 - C) Barrel
 - D) Flat
- 9) When a piston ring is marked with a "dot", the ring is to be installed with the "dot" facing the _____. 9) _____
- A) Top of the piston
 - B) Front of the piston
 - C) Front of the engine
 - D) Bottom of the piston
- 10) Many aluminum piston skirts are plated with _____. 10) _____
- A) Tin or moly graphite
 - B) Lead
 - C) Antimony
 - D) Terneplate

Answer Key

Testname: ENGINES9_29B

1) D

Page Ref: 421

2) A

Page Ref: 421

3) D

Page Ref: 423

4) B

Page Ref: 433

5) A

Page Ref: 426

6) C

Page Ref: 427

7) B

Page Ref: 420, 423

8) B

Page Ref: 419

9) A

Page Ref: 435

10) A

Page Ref: 422