

Automotive Engines 10th

Quiz 29A

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

1. The space behind the piston ring is called _____. 1. _____
 - A) side clearance
 - B) forward clearance
 - C) back clearance
 - D) piston ring clearance

2. Piston ring gap should only be measured after _____. 2. _____
 - A) all cylinder work has been performed
 - B) installing the piston in the cylinder
 - C) installing the rings on the piston
 - D) Both A and C

3. Full floating piston pins are retained by _____. 3. _____
 - A) lock rings
 - B) a drilled hole with a roll pin
 - C) an interference fit between rod and piston pin
 - D) an interference fit between piston and piston pin

4. 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? 4. _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians A and B
 - D) Neither technician A nor B

5. Many aluminum piston skirts are plated with _____. 5. _____
 - A) tin or moly graphite
 - B) lead
 - C) antimony
 - D) terneplate

6. Cam ground pistons, as they warm up, take on which of these shapes? 6. _____
 - A) Oval
 - B) Round
 - C) Tapered
 - D) No change

7. Technician A says that some piston rings may be coated with ceramic. Technician B says that ring end gap is non-adjustable; therefore there is no need to check it when reassembling the engine. Which technician is correct? 7. _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians A and B
 - D) Neither technician A nor B

8. All of the following are methods of piston to rod attachment EXCEPT _____. 8. _____
- A) free floating
 - B) full-floating
 - C) woodruff key
 - D) press fit to rod
9. 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 to _____. 9. _____
- A) reduce HC emissions
 - B) raise the compression ratio
 - C) protect the second piston ring
 - D) reduce the cost of the piston
10. Which type of connecting rod needs to be heated to install the piston pin? 10. _____
- A) Forged
 - B) Interference fit
 - C) Floating
 - D) PM rods

Answer Key

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3. A
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4. B
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5. A
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