

Name: _____ Date: _____

1. What is the atmospheric pressure at sea level?
 - A. 14.7 PSI
 - B. 15 PSI
 - C. 13.7 PSI
 - D. 16 PSI

2. What is the result of a vacuum on both sides of the power piston in a vacuum brake booster?
 - A. The piston moves forward.
 - B. The piston moves backward.
 - C. The piston is held against the rear of the housing.
 - D. The piston is released from the housing.

3. What happens to the air valve in the released position (brake pedal up) of a vacuum brake booster?
 - A. It opens the air passage.
 - B. It is seated on the floating control valve.
 - C. It allows atmospheric pressure on both sides of the diaphragm.
 - D. It activates the pressure differential.

4. What is the function of the check valve in a vacuum brake booster?
 - A. To maintain vacuum in the booster.
 - B. To release vacuum during brake application.
 - C. To filter the air entering the booster.
 - D. To equalize pressure on both sides of the diaphragm.

5. What is the role of the power-piston return spring in a vacuum brake booster?
 - A. To push the piston forward during brake application.
 - B. To hold the piston against the reaction retainer.
 - C. To push the piston back when the brakes are released.
 - D. To maintain pressure differential.

6. What is indicated by a low, soft brake pedal according to the chapter?
 - A. Air trapped in the hydraulic system.
 - B. Proper booster function.
 - C. A need for brake fluid refill.
 - D. An engaged parking brake.

7. How many power-assisted brake applications should there be after the engine stops running?
 - A. At least one.
 - B. At least two.
 - C. At least three.
 - D. None.

8. What is the reaction of the brake pedal during a vacuum booster operation test with proper vacuum?

- A. The pedal should remain firm.
- B. The pedal should rise.
- C. The pedal should lock.
- D. The pedal should drop.

9. What is the expected behavior of the brake pedal in a vehicle equipped with a brake assist system during a panic stop?

- A. The pedal should become harder to press.
- B. The pedal should assist in applying maximum force.
- C. The pedal should disengage the brakes.
- D. The pedal should adjust the brake fluid pressure.

10. What is the function of the atmospheric valve in a vacuum brake booster?

- A. To store excess vacuum.
- B. To assist in brake fluid circulation.
- C. To provide an opening for atmospheric pressure during brake application.
- D. To filter contaminants from the vacuum.

Automotive Technology 7th Edition

Chapter 104

Multiple Choice Quiz B

Answer Key

1. A

2. C

3. B

4. A

5. C

6. A

7. B

8. D

9. B

10. C