

Name \_\_\_\_\_

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

- 1) What input(s) do/does the Magnasteer system use to determine the amount of power steering assist needed? 1) \_\_\_\_\_
  - A) Wheel speed sensor
  - B) Mass airflow sensor
  - C) Both A and B
  - D) Neither A nor B
  
- 2) The specified power steering fluid is found where? 2) \_\_\_\_\_
  - A) On the cap of the power steering reservoir
  - B) In the owner's manual
  - C) In service information
  - D) All of the above
  
- 3) A partially clogged power steering filter can cause what type of problem? 3) \_\_\_\_\_
  - A) A noise, especially when cold
  - B) Lack of power assist when the engine is warm
  - C) A power steering fluid leak from the steering gear
  - D) Overflowing of the power steering fluid out of the top of the reservoir
  
- 4) Which of the following represents typical power steering pressures? 4) \_\_\_\_\_
  - A) Less than 150 psi when straight ahead
  - B) About 450 psi when cornering
  - C) Over 750 psi when slowly maneuvering a parking lot
  - D) All of the above are correct
  
- 5) Technician A says that some power assist systems use an external cooler for the power steering fluid. Technician B says that the cooler is located in the pressure line, before the steering gear box. Which technician is correct? 5) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B
  
- 6) A power steering pressure gauge is being used to diagnose a system problem on a rack and pinion system. When the wheels are turned all the way left, a pressure reading less than specification is found. When the gauge valve is closed, the pressure reading is within specifications. Technician A says that the pump pressure regulator is bad. Technician B says that there is a problem in the rack assembly. Which technician is correct? 6) \_\_\_\_\_
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B

- 7) Where is the rotary control valve located on a power rack and pinion steering gear? 7) \_\_\_\_\_
- A) In the rack tube, just behind the rack seal retainers
  - B) Behind the mounting brackets
  - C) Under the dampening adjuster
  - D) Between the steering gear input shaft and the pinion gear
- 8) A power steering pressure test is being performed, and the pressure is higher than specifications with the engine running and the steering wheel stationary in the straight ahead position. Technician A says that a restricted high pressure line could be the cause. Technician B says that internal leakage inside the steering gear or rack and pinion unit could be the cause. Which technician is correct? 8) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B
- 9) Which of these is NOT part of a power steering rotary control valve? 9) \_\_\_\_\_
- A) Torsion bar
  - B) Inner valve element
  - C) Pinion drive gear
  - D) Outer valve element
- 10) Some vehicles are equipped to signal the computer whenever the power steering pressures increase so the idle speed can be increased to prevent stalling during turns at low speeds. What component signals the computer? 10) \_\_\_\_\_
- A) Pressure relief valve
  - B) Power steering pressure switch
  - C) Rotary valve
  - D) Flow control valve

## Answer Key

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- 1) A  
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- 2) D  
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- 3) A  
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- 4) D  
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- 5) A, C  
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- 6) B  
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- 7) D  
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- 8) A  
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- 9) C  
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- 10) B  
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