Automotive Technology 7th Edition
Chapter 114
Multiple Choice Quiz A

Name: _____ Date: _____

1. What is the typical variable-rate air spring system used for in vehicle suspension?
A. To monitor and adjust the engine performance
B. To monitor trim height and provide input signals to the ECM
C. To control the temperature inside the vehicle
D. To adjust the vehicle's speed automatically

2. What is the function of the height sensors in an air suspension system?
A. To measure the vehicle's speed
B. To control the air conditioning system
C. To monitor trim height and provide input signals to the ECM
D. To detect the level of fuel in the tank

3. What is the purpose of the air compressor with a regenerative dryer in an air suspension system?
A. To provide air change required to inflate the air springs
B. To cool the vehicle's engine
C. To inflate the vehicle's tires
D. To filter the vehicle's exhaust gases

4. What is the role of the exhaust solenoid in the air suspension system?
A. To control the air flow to the engine
B. To regulate the temperature inside the vehicle
C. To control the exhaust flow from the air springs
D. To control the air pressure release from the air springs

5. What is the function of the bi-state dampers in an electronic suspension system?
A. To control the electrical flow to the engine
B. To control fluid flow in the unit to control compression and rebound actions
C. To adjust the brightness of the headlights
D. To signal turns and stops

6. What does the General Motors computer command ride (CCR) system control?
A. The vehicle's navigation system
B. The audio system volume
C. Ride firmness by automatically controlling an actuator in each of the four struts
D. The air conditioning system

7. What is the magneto-rheological (MR) fluid used for in shock absorbers?
A. To lubricate the engine parts
B. To clean the windshield
C. To change viscosity rapidly depending on electric current for damping control
D. To fuel the vehicle

8. What is the significance of the ride select switch in an electronic suspension system?
A. It allows the driver to choose the vehicle's speed
B. It allows the driver to select the desired firmness of the ride
C. It is used to select the radio station
D. It controls the vehicle's GPS system

9. What does an excessively running ride height compressor indicate?
A. Low tire pressure
B. A vacuum leak in the engine
C. A need for an oil change
D. An air leak in the suspension system

10. What happens to MR fluid when an electrical current is applied to it?
A. It changes color
B. It changes viscosity
C. It solidifies
D. It evaporates

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Answer Key

1. B

2. C

3. A

4. D

5. B

6. C

7. C

8. B

9. D

10. B