Automotive Technology 7th Edition
Chapter 71
Multiple Choice Quiz A

Name: _____ Date: _____

1. What is the expected voltage reading from a TP sensor at idle with the ignition on and engine off?
A. 0.1 volts
B. 0.5 volts
C. 1.0 volts
D. 4.5 volts

2. When testing a TP sensor, what indicates a good sensor on a waveform recorded on a DSO?
A. Presence of glitches
B. Fluctuating transitions
C. Clean transitions without glitches
D. A constant voltage reading

3. Which of the following is NOT a wire typically found on a TP sensor?
A. 5-volt reference feed wire
B. Signal return (ground wire)
C. Voltage signal wire
D. 12-volt power wire

4. What should the TP sensor voltage be at wide-open throttle (WOT)?
A. 0.5 volts
B. 1.0 volts
C. 4.5 volts
D. 5.0 volts

5. How are TP sensors typically adjusted?
A. By changing the engine's RPM
B. By reprogramming the PCM
C. By replacing the sensor with a new one
D. By loosening their retaining screws and moving the sensor

6. What is the purpose of the TP sensor in relation to fuel delivery?
A. To decrease fuel supply at all throttle positions
B. To signal the PCM to reduce fuel when the throttle is closed
C. To maintain a constant air-fuel mixture regardless of throttle position
D. To signal the PCM to pulse additional fuel when the throttle is depressed

7. What is a typical diagnostic trouble code (DTC) procedure for a TP sensor?
A. Replacing the sensor if the voltage reading is smooth
B. Ignoring voltage irregularities as they are common
C. Replacing the sensor if erratic voltage readings are obtained
D. Adjusting the sensor to read higher voltages at idle

8. Using a scan tool, what is the expected TP sensor voltage display with the key on and engine off?
A. 0.2 volts
B. 0.5 volts
C. 1.0 volts
D. 1.2 volts

9. What is the primary function of the Engine Coolant Temperature (ECT) sensor in computer-equipped vehicles?
A. To provide the computer with engine temperature for fuel mixture and ignition timing
B. To monitor the oil temperature
C. To control the air conditioning system
D. To regulate the transmission fluid temperature

10. What is the typical behavior of an ECT sensor's resistance as the coolant temperature increases?
A. Resistance increases
B. Resistance remains constant
C. Resistance decreases
D. Resistance fluctuates unpredictably

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Answer Key

1. B

2. C

3. D

4. C

5. D

6. D

7. C

8. B

9. A

10. C