Automotive Technology 7th Edition
Chapter 72
Multiple Choice Quiz B

Name: _____ Date: _____

1. How is a MAF sensor tested?
A. By measuring the resistance across the sensor
B. By checking the sensor's response to changes in air temperature
C. By measuring the frequency (Hz) output of the sensor
D. By applying external pressure to the sensor

2. What is the purpose of a MAF sensor?
A. To measure the temperature of the air entering the engine
B. To measure the mass of air entering the engine
C. To measure the speed of air entering the engine
D. To measure the pressure of air entering the engine

3. What is meant by a “high-authority sensor”?
A. A sensor that has a major influence over the engine's ignition timing
B. A sensor that has a major influence over the amount of fuel being delivered to the engine
C. A sensor that primarily influences the air conditioning system
D. A sensor that controls the vehicle's speed

4. Which sensor is considered a high-authority sensor during engine acceleration and deceleration?
A. ECT
B. IAT
C. O2S
D. TP

5. What is the function of the burn-off circuit in some MAF sensors?
A. To measure the air temperature after the engine is turned off
B. To cool down the sensing wire after the engine is turned off
C. To clean the sensing wire by heating it to a high temperature
D. To prevent the sensing wire from overheating during engine operation

6. What does the tap test for a MAF sensor involve?
A. Tapping the sensor with a hammer to check for durability
B. Gently tapping the sensor to see if the engine's performance changes
C. Tapping into the sensor's electrical circuit to measure voltage
D. Applying tap water to the sensor to check for water damage

7. What is false air in the context of MAF sensors?
A. Air that is too hot for the sensor to measure accurately
B. Air that bypasses the sensor due to leaks or openings in the intake system
C. Air that is too cold and dense for the sensor to measure
D. Air that is recirculated from the exhaust system

8. What is the PCM's action when a MAF sensor fails?
A. It shuts down the engine to prevent damage
B. It uses default values for fuel delivery
C. It relies on the TP sensor and engine RPM for fuel delivery
D. It increases fuel delivery to compensate for the lack of airflow data

9. What does a skewed sensor mean in automotive diagnostics?
A. A sensor that is physically misaligned
B. A sensor that is providing incorrect information to the PCM
C. A sensor that has a slow response time
D. A sensor that is not powered correctly

10. Which diagnostic trouble code indicates a mass airflow circuit high output?
A. P0100
B. P0101
C. P0102
D. P0103

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Answer Key

1. C

2. B

3. B

4. D

5. C

6. B

7. B

8. C

9. B

10. D