

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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Chapter 77

Multiple Choice Quiz B

Answer Key

1. C

2. B

3. B

4. D

5. C

6. B

7. B

8. C

9. B

10. D