Automotive Technology 7th Edition
Chapter 71: Temperature and Throttle Position Sensors
Matching Quiz

Name: _____ Date: _____

Matching: Choose the item in column 2 that best matches each item in column 1.

1. Engine Coolant Temperature (ECT) Sensor	A. A semiconductor whose resistance decreases as temperature increases, making it more electrically conductive when hot.	1. _____
2. Negative Temperature Coefficient (NTC) Thermistor	B. Used by the PCM along with the ECT to determine engine temperature, and issues with it can cause stalling or hesitation.	2. _____
3. Stepped ECT circuit	C. Measures the oxygen in the exhaust stream.	3. _____
4. Intake Air Temperature (IAT) Sensor	D. Measures the temperature of the air entering the engine, used for fuel control and spark timing.	4. _____
5. Cylinder Head Temperature (CHT) Sensor	E. Used to measure the temperature of the engine coolant, providing crucial input for fuel mixture and spark timing.	5. _____
6. Engine Fuel Temperature (EFT) Sensor	F. Uses a step-up resistor to effectively broaden the range of the ECT sensor, applying different resistances based on temperature.	6. _____
7. Exhaust Gas Recirculation (EGR) Temperature Sensor	G. Measures the temperature and density of fuel in electronic returnless fuel injection systems.	7. _____
8. Engine Oil Temperature Sensor	H. Measures the temperature of exhaust gases and is used to monitor the functioning of the EGR valve.	8. _____
9. Throttle Position (TP) Sensor	I. A variable-resistance sensor with three terminals, commonly used for throttle position.	9. _____
10. Potentiometer	J. Signals the PCM the position of the throttle, used to pulse additional fuel from injectors when the throttle is depressed.	10. ____

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Answer Key

Answer Key:

1. E
2. A
3. F
4. D
5. B
6. G
7. H
8. C
9. J
10. I