

# Automotive Technology 7<sup>th</sup> Edition

## Chapter 71 – Temperature and Throttle Position Sensors

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Engine Coolant Temperature Sensors and Testing the Engine Coolant Temperature Sensor
2. Intake Air Temperature Sensor and Testing the Intake Air Temperature Sensor
3. Other Temperature Sensors, and Throttle Position Sensor Construction
4. TP Sensor Computer Input Functions and PCM Uses for the TP Sensor
5. Testing the Throttle Position Sensor



#### **OBJECTIVES:**

1. Describe the purpose and function of engine coolant temperature sensors.
2. Describe how to inspect and test temperature sensors.
3. Explain the function and testing of intake air temperature sensors, including sensor DTCs.
4. Discuss the other temperature sensors that may be found on vehicles.
5. Describe the construction and function of a TP sensor.
6. Discuss TP sensor input.
7. Discuss the PCM uses for the TP sensor.
8. Describe how to test the TP sensor, including sensor DTCs.



#### **RESOURCES:** (All resources may be found at jameshalderman.com)

1. Task Sheet: Temperature Sensor Scan Tool Diagnosis
2. Task Sheet: Throttle Position Sensor Testing
3. Chapter PowerPoint
4. Crossword Puzzle and Word Search
5. Videos: [\(A8\) Engine Performance Videos](#)
6. Animations: [\(A8\) Engine Performance Animations](#)



#### **ACTIVITIES:**

1. Task Sheet: Temperature Sensor Scan Tool Diagnosis
2. Task Sheet: Throttle Position Sensor Scope Test
3. Crossword Puzzle and Word Search



#### **ASSIGNMENTS:**

1. Chapter crossword and word search puzzles from the website.
2. Complete end of chapter quiz from the textbook.
3. Complete multiple choice and short answer quizzes downloaded from the website.



#### **CLASS DISCUSSION:**

1. Review and group discussion chapter [Frequently Asked Questions](#) and [Tech Tips](#) sections.
2. Review and group discussion of the five (5) chapter [Review Questions](#).



#### **NOTES AND EVALUATION:**