

Automotive Technology 7th Edition

Chapter 73 – Oxygen Sensors

Lesson Plan



CHAPTER SUMMARY:

1. Oxygen Sensors, PCM Uses of the Oxygen Sensor, and Oxygen Sensor Diagnosis
2. Post-Catalytic Converter Oxygen Sensor Testing and Wide-Band Oxygen Sensors
3. Dual Cell Planar Wide-Band Sensor Operation and Dual Cell Diagnosis
4. Single Cell Wide-Band Oxygen Sensors, and Oxygen Sensor Related Diagnostic Trouble Codes



OBJECTIVES:

1. Discuss how O2S sensors work.
2. Discuss PCM uses of the oxygen sensor.
3. Discuss oxygen sensor diagnosis.
4. Discuss post-catalytic converter O2S testing.
5. Explain the operation of wide-band oxygen sensors.
6. Describe dual cell planar wide-band sensor operation.
7. Discuss dual cell diagnosis.
8. Describe single cell wide-band oxygen sensors.
9. Interpret oxygen sensor-related diagnostic trouble codes.



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

1. Task Sheet: Oxygen Sensor Diagnosis
2. Task Sheet: Wide-Band Oxygen Sensor
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: Oxygen Sensor Diagnosis
2. Task Sheet: Wide-Band Oxygen Sensor
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: