**Automotive Chassis Systems 8th Edition**

**Chapter 23 –** **Tire-Pressure Monitoring Systems**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Need for Tire Pressure Monitoring, Tread Act, and Indirect TPMS

2. Direct TPMS, TPMS Pressure Sensors, and TPMS Sensor Operation

3. TPMS Receiver, TPMS Diagnosis, and TPMS Sensor Activation

4. TPMS Diagnostic Tools, Sensor Replacement Option, and TPMS Sensor Relearn

5. TPMS Sensor Service Tools

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**OBJECTIVES:**

1. Explain why a tire-pressure monitoring system (TPMS) is used.

2. Discuss the TREAD Act.

3. Explain indirect and direct TPMS.

4. List the two types of TPMS pressure sensors.

5. Discuss TPMS sensor operation and the TPMS receiver.

6. Explain direct TPMS diagnosis and TPMS diagnostic tools.

7. List replacement options for TPMS sensors.

8. Describe how to relearn TPMS sensors and the tools needed to service a TPMS.

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**RESOURCES:** [(All resources may be found at jameshalderman.com)](https://jameshalderman.com/)

1. Task Sheet: Tire Pressure Monitoring System

2. [Crossword Puzzle and Word Search](https://jameshalderman.com/a4_puzzles_lib_page/)

3. [Videos: ASE A4 Suspension and Steering](https://jameshalderman.com/a4_vid_lib_page/)

4. [Animations: ASE A4 Suspension and Steering](https://jameshalderman.com/a4_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Tire Pressure Monitoring System

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**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.

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**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.

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**NOTES AND EVALUATION:**

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