**Automotive Chassis Systems 8th Edition**

**Chapter 24 –** **Tire and Wheel Service**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Tire Service and Proper Inflation, Nitrogen Inflation, and Tire Inspection

2. Wheel Removal/Installation, Tire Rotation, Radial Runout, and Lateral Runout

3. Tire Replacement, Tire Balancing, Wheel Weights, and Wheel/Tire Balancers

4. Tire Repair

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**OBJECTIVES:**

1. State the importance of proper tire inflation.

2. Describe tire inspection.

3. Describe the correct sequence for lug nut removal, tightening procedure, and torque for wheel installation.

4. State the purpose of tire rotation.

5. Discuss radial runout and lateral runout.

6. List the steps for replacing a tire.

7. Discuss how to balance wheel and tire assembly (static and dynamic).

8. Discuss how to repair tires using internal patch.

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

1. Task Sheet: Tire Inspection and Air Loss

2. Task Sheet: Tire Vibration and Pull Diagnosis

3. Task Sheet: Tire Rotation

4. Task Sheet: Tire, Wheel, Axle, and Hub Runout

5. Task Sheet: Tire Replacement

6. Task Sheet: Tire Repair

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

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

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

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**ACTIVITIES:**

1. Task Sheet: Tire Inspection and Air Loss

2. Task Sheet: Tire Vibration and Pull Diagnosis

3. Task Sheet: Tire Rotation

4. Task Sheet: Tire, Wheel, Axle, and Hub Runout

5. Task Sheet: Tire Replacement

6. Task Sheet: Tire Repair

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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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