**Automotive Steering, Suspension & Alignment**

**Chapter 4 –** **Tires and Wheels**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Introduction to Tires, Parts of a Tire, Tire Molding, and Service Description

2. High-Flotation Tire Sizes, Load Index and Equivalent Loads, and Speed Ratings

3. Tire Pressure and Traction, Rim wight and Tire Size, and Uniform Tire Quality Grading System

4. All-Season Tire Designation, Types of Tires, DOT Tire Code, and Tire Concicity and Ply Steer

5. Vehicle Handling and Tire Slip Angle, Spare Tires, Run-Flat Tires, and GM TPC Rating

6. Tire Selection Considerations, Noise-Reducing Tires, Wheels, Tire Valves, and Unsprung Weight

7. Lug Nuts

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**OBJECTIVES:**

1. Explain the purpose and functions of tires.

2. Identify the parts of a tire and describe how it is constructed.

3. Discuss tire sizes, load index, ratings, specifications, and grading.

4. Discuss tire conicity and vehicle handling.

5. Describe spare tires and run-flat tires.

6. Describe tire selection considerations.

7. Explain the construction and sizing of steel and alloy wheels and attaching hardware.

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

1. Task Sheet: Tire Information

2. Chapter PowerPoint

3. [Crossword and Word Search Puzzles (A4)](https://jameshalderman.com/a4_puzzles_lib_page/)

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

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

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**ACTIVITIES:**

1. Task Sheet: Tire Information

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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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