

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

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 concicity 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.

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



1. Task Sheet: Tire Information
2. Chapter PowerPoint
3. [Crossword and Word Search Puzzles \(A4\)](#)
4. [Videos: \(A4\) Suspension and Steering](#)
5. [Animations: \(A4\) Suspension and Steering](#)

ACTIVITIES:



1. Task Sheet: Tire Information

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:

