**Automotive Steering, Suspension & Alignment**

**Chapter 7 –** **Suspension System Components and Operation**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Frame Construction, Platforms, Unsprung Weight, Types of Suspensions, and Hooks Law

2. Coil Springs, Leaf Springs, Torsion Bars, Suspension Principles, and Steering Knuckles

3. Control Arms, Ball Joints, Strut Rods, Stabilizer Bars, Shock Absorbers, Struts, and Bump Stops

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**OBJECTIVES:**

1. Describe the purpose of a suspension system.

2. List the various types of suspensions and their component parts.

3. Define Hooke’s law and explain how coil, leaf, and torsion bar springs work.

4. Describe how suspension components allow wheel movement up and down and provide for turning.

5. Describe how shock absorbers control spring forces.

6. Describe the function of bump stops.

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

1. Task Sheet: Suspension and Steering System 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: Suspension and Steering System 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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