Automotive Technology 6th Edition Chapter 116 – Suspension System Components and Operation Lesson Plan

CHAPTER SUMMARY:

- 1. Frame construction, platforms, unsprung weight, and types of suspension
- 2. Hook's law, coil springs, leaf springs, torsion bars, and suspension principles
- 3. Steering knuckles, control arms, ball joints, strut rods, stabilizer bars, and shock absorbers
- 4. Struts and bump stops



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.

7. This chapter will help prepare for ASE Suspension and Steering (A4) certification content area "B" (Suspension System diagnosis and Repair).

<u>RESOURCES</u>: (All resources may be found at <u>http://www.jameshalderman.com</u>) Internet access required to hyperlink.

- 1. Task Sheet ASE (A4-A-2) P-1: Suspension and Steering System Information
- 2. Task Sheet ASE (A4-A-1) P-1: Research Vehicle Service Information
- 3. Chapter PowerPoint
- 4. Chapter Crossword Puzzle and Word Search
- 5. Videos: (A4) Suspension and Steering Videos
- 6. Animations: (A4) Suspension and Steering Animations

ACTIVITIES:

1. Task Sheet ASE (A4-A-2) P-1: Have students complete Suspension and Steering System Information Task Sheet.

2. Task Sheet ASE (A4-A-1) P-1: Have students complete Research Vehicle Service Information Task Sheet.



DEMO

ASSIGNMENTS:

- 1. Chapter crossword and word search puzzles.
- 2. Complete end of chapter 10 question quiz.



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 <u>Review Questions</u>.



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NOTES AND EVALUATION:



