Automotive Chassis Systems 8th Edition Chapter 7 – Hydraulic Valves and Switches Lesson Plan



CHAPTER SUMMARY:

- 1. Pressure-Differential Switch (Brake Warning Switch) and Brake Fluid Level Sensor
- 2. Proportioning Valve and Electronic Brake Proportioning
- 3. Metering Valve (Hold-Off) Operation and Combination Valves
- 4. Brake Pedal Position Sensor/Switch

OBJECTIVES:



- 1. Describe the operation of a pressure-differential switch and a brake fluid level sensor switch.
- 2. Describe the operation of the proportioning valve.
- 3. Discuss the need and use of a metering valve.
- 4. List the components included in a combination valve.
- 5. Describe how a brake light switch works.

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RESOURCES: (All resources may be found at jameshalderman.com)

- 1. Task Sheet: Brake Control Valves
- 2. Task Sheet: Red Brake Warning Lamp Diagnosis
- 3. Task Sheet: Brake Stop Light Switch/Sensor
- 4. Chapter PowerPoint
- 5. Crossword Puzzle and Word Search
- 6. Videos: ASE A5 Brakes
- 7. Animations: ASE A5 Brakes



ACTIVITIES:

- 1. Task Sheet: Brake Control Valves
- 2. Task Sheet: Red Brake Warning Lamp Diagnosis
- 3. Task Sheet: Brake Stop Light Switch/Sensor

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 <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.
- 2. Review and group discussion of the five (5) chapter Review Questions.

NOTES AND EVALUATION:



