# Automotive Technology 6<sup>th</sup> Edition Chapter 110 – ABS Components and Operation Lesson Plan

## **CHAPTER SUMMARY:**



- 1. Antilock brake system, ABS parts involved, ABS channels, and nonintegral ABS
- 2. ABS controller inputs and outputs and wheel speed sensors, and
- 3. Hydraulic modulator assembly and advanced ABS functions,

### **OBJECTIVES:**

- 1. Explain the need for Antilock brake system (ABS).
- 2. Describe the operation, components, and system configurations of ABS.
- 3. Explain the operation of passive and active wheel speed sensors.
- 4. This chapter will help prepare for the Brakes (A5) ASE certification test content area "D" (Electronic Brake Control Systems: Antilock Brake System (ABS), Traction Control System (TCS), and Electronic Stability Control System (ESC) Diagnosis and Repair).

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**RESOURCES**: (All resources may be found at <a href="http://www.jameshalderman.com">http://www.jameshalderman.com</a>) Internet access required to hyperlink.

- 1. Task Sheet ASE (A5-G-1) P-1: Traction Control/Vehicle Stability
- 2. Chapter PowerPoint
- 3. Chapter Crossword Puzzle and Word Search
- 4. Videos: (A5) Brakes Videos
- 5. Animations: (A5) Brakes Animations



### **ACTIVITIES:**

1. Task Sheet ASE (A5-G-1) P-1: Have students complete Traction Control/Vehicle Stability Task Sheet.

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### **ASSIGNMENTS:**

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

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# **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.

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### **NOTES AND EVALUATION:**

