Automotive Technology 6th Edition Chapter 112 – Electronic Stability Control Systems Lesson Plan

CHAPTER SUMMARY:



- 1. The need for electronic stability control and Federal Motor Safety Standard (FMVSS) No. 126
- 2. Sine with dwell test, and ESC sensors, traction control, and ESC/TC diagnosis



OBJECTIVES:

- 1. Discuss the need for electronic stability control (ESC).
- 2. List the requirements for ESC systems.
- 3. Describe how to test the functioning of an ESC system.
- 4. List the sensors needed for the ESC system.
- 5. Describe how a traction control (TC) system works.
- 6. List the steps in the diagnostic process for ESC and TC system faults.
- 7. This chapter will help prepare for 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).



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



ASSIGNMENTS:

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



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:

