

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



1. **Task Sheet ASE (A5-G-1) P-1:** Traction Control/Vehicle Stability
 2. Chapter PowerPoint
 3. Chapter Crossword Puzzle and Word Search
 4. Animations: Traction Control
 5. Videos: ABS and traction control (time 18:35) and Traction control (time 1:14)
 6. Videos: Electronic stability program (time 2:03) and EBCM replace (time 9:27)
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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 [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:

