

# Automotive Technology 6<sup>th</sup> Edition

## Chapter 119 – Electronic Suspension Systems

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. The need for electronic suspensions and electronic suspension controls and sensors
  2. Electronic suspension system actuators, types of suspension, and automatic level control (ALC)
  3. Troubleshooting rear electronic leveling systems and magneto-rheological (MR) suspension
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#### **OBJECTIVES:**

1. Discuss the need for electronic suspension systems.
  2. Explain the characteristics of the various sensors used for electronic suspension control.
  3. Describe electronic suspension system actuators.
  4. List the types of electronic suspension systems.
  5. Describe the parts and operation of the automatic level control system.
  6. Explain the procedure to troubleshoot rear electric leveling systems.
  7. Explain how magneto-rheological shocks work.
  8. This chapter will help prepare for ASE Suspension and Steering (A4) certification content area “C” (Related Suspension and Steering Service).
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**RESOURCES:** (All resources may be found at <http://www.jameshalderman.com>)

1. **Task Sheet ASE (A4-D-3) P-3:** Electronic Suspension Diagnosis
  2. Chapter PowerPoint
  3. Chapter Crossword Puzzle and Word Search
  4. Videos: Monroe CCES (time 6:47) and Bose Active Suspension (time 2:18)
  5. Videos: Electronic Air Suspension System (time 1:41) and FWD steering and suspension (time 0:32)
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#### **ACTIVITIES:**

1. **Task Sheet ASE (A4-D-3) P-3:** Have students complete Electronic Suspension Diagnosis 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:**

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