# 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



# **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 <a href="http://www.jameshalderman.com">http://www.jameshalderman.com</a>) Internet access required to hyperlink.

- 1. Task Sheet ASE (A4-D-3) P-3: Electronic Suspension Diagnosis
- 2. Chapter PowerPoint
- 3. Chapter Crossword Puzzle and Word Search
- 4. Videos: (A4) Suspension and Steering Videos
- 5. Animations: (A4) Suspension and Steering Animations

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### **ACTIVITIES:**

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

