Automotive Technology 7th Edition Chapter 56 – Airbags and Pretensioner Circuits **Lesson Plan**

CHAPTER SUMMARY:

- 1. Safety Belts and Retractors, Front Airbags, and Airbag Diagnosis Tools and Equipment
- 2. Airbag System Service and Driver Side Airbag Module Replacement
- 3. Safety When Manually Deploying Airbags and Occupant Detection Systems
- 4. Seat and Side Curtain Airbags and Event Data Recorders

OBJECTIVES:



- 1. Explain how safety belts and retractors function.
- 2. Explain the operation of front airbags.
- 3. Describe the procedures to diagnose common faults in airbag systems.
- 4. Describe the procedures to repair common faults in airbag systems.
- 5. Discuss driver side airbag module replacement.
- 6. Discuss safety issues when manually deploying airbags.
- 7. Explain how the passenger presence system works.
- 8. Describe how seat and side curtain airbags function.
- 9. Describe the data recorded by an event data recorder when an airbag is deployed.



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

- 1. Task Sheet: Airbag Operation and Diagnosis
- 2. Task Sheet: Disarm and Enable Airbags
- 3. Chapter PowerPoint
- 4. Crossword Puzzle and Word Search
- 5. Videos: (A6) Electrical/Electronic Systems Videos
- 6. Animations: (A6) Electrical/Electronic Systems Animations

DEMO

ACTIVITIES:

- 1. Task Sheet: Airbag Operation and Diagnosis
- 2. Task Sheet: Disarm and Enable Airbags
- 3. Crossword Puzzle and Word Search

ASSIGNMENTS:



- 1. Chapter crossword and word search puzzles from the website.
- 2. Complete end of chapter quiz from the textbook.
- 3. Complete multiple choice and short answer quizzes downloaded from the website.



- 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:





