# Automotive Technology 7<sup>th</sup> Edition Chapter 76 – Gasoline Direct Injection Systems Lesson Plan

### **CHAPTER SUMMARY:**



- 1. Direct Fuel Injection, Direct-Injection Fuel Delivery System, Mode of Operation, and Piston Top Designs
- 2. Port- and Direct- Injection Systems, Engine Start Systems, and GDI Issues



### **OBJECTIVES:**

- 1. Explain how a direct fuel-injection system works.
- 2. Describe the direct-injection fuel delivery system.
- 3. Describe modes of operation.
- 4. Discuss GDI piston designs.
- 5. Discuss port/direct injection systems.
- 6. Discuss engine start systems.
- 7. Discuss GDI service issues.



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

- 1. Task Sheet: Gasoline Direct Injection Identification
- 2. Chapter PowerPoint
- 3. Crossword Puzzle and Word Search
- 4. Videos: (A8) Engine Performance Videos
- 5. Animations: (A8) Engine Performance Animations

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# **ACTIVITIES**:

- 1. Task Sheet: Gasoline Direct Injection Identification
- 2. 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.

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## **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:**



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