**Advanced Engine Performance Diagnosis 8th Edition**

**Chapter 23 – Gasoline Direct-Injection (GDI) Systems**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Direct Fuel Injection, Direct-Injection Fuel Delivery System, and Modes of Operation

2. Piston Top Design, Port- and Direct-Injection Systems, Engine Start System and GDI Issues

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**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.

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

1. Task Sheet: Gasoline Direct Injection Identification

2. Chapter PowerPoint

3. Crossword and Word Search Puzzles

4. Videos: (A8) Fuel, Air Induction, and Exhaust Systems Diagnosis and Repair

5. Animations: (A8) Fuel, Air Induction, and Exhaust Systems Diagnosis and Repair

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**ACTIVITIES:**

1. Task Sheet: Gasoline Direct Injection Identification

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**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 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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