**Automotive Electrical and Engine Performance - 9th edition**

**Ch29: Ignition System Parts and Operation**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Ignition Systems, Ignition Coils, Ignition Switching and Triggering, and Ignition System Operation

2. Waste-Spark Ignition Systems, Coil-On-Plug Ignition, Ignition Timing, Knock Sensors and Spark Plugs

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**OBJECTIVES:**

1. Discuss ignition systems.

2. Discuss ignition coils.

3. Discuss ignition switching and triggering.

4. Describe ignition system operation.

5. Describe the operation of waste-spark ignition systems.

6. Describe the operation of coil-on-plug ignition systems.

7. Discuss ignition timing.

8. Discuss knock sensors.

9. Describe the different types of spark plugs. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Task Sheet: Ignition System Identification

2. Crossword Puzzle and Word Search

3. Videos: (A8) Engine Performance Videos

4. Animations: (A8) Engine Performance Animations

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**ACTIVITIES:**

1. Task Sheet: Ignition System Identification

2. Crossword Puzzle and Word Search

3. Chapter PowerPoint

4. Crossword Puzzle and Word Search

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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. Ten (10) question end of Chapter Quiz.

3. Five (5) end of chapter Review Question for class discussion.

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**NOTES AND EVALUATION:**

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