

# Automotive Technology 7<sup>th</sup> Edition

## Chapter 68 – Ignition System Parts and Operation

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Ignition System, 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



#### **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. Task Sheet: Spark Plug Specifications
3. Chapter PowerPoint
4. Crossword Puzzle and Word Search
5. Videos: [\(A8\) Engine Performance Videos](#)
6. Animations: [\(A8\) Engine Performance Animations](#)



#### **ACTIVITIES:**

1. Task Sheet: Ignition System Identification
2. Task Sheet: Spark Plug Specifications
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.



#### **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](#).



#### **NOTES AND EVALUATION:**