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

**Ch8: Wiring Schematics and Circuit Testing**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Wiring Schematics and Symbols, Schematic Symbols, and Relay Terminal and Identification

2. Locating an Open Circuit, Common Power or Ground, and Circuit Troubleshooting

3. Locating a Short Circuit and Step-by-Step Troubleshooting Procedure

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**OBJECTIVES:**

1. Describe what information wiring schematics include.

2. Interpret wiring schematics.

3. Explain the procedure to identify relay terminals.

4. Explain how to locate an open circuit.

5. Describe how to check for common power or ground.

6. Discuss circuit troubleshooting.

7. Explain the different methods to locate a short circuit.

8. Explain the procedure to troubleshoot an electrical problem. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Task Sheet: Locate Shorts, Grounds, and Opens

2. Crossword Puzzle and Word Search

3. Videos: (A6) Electrical/Electronic Systems Videos

4. Animations: (A6) Electrical/Electronic Systems Animations

5. Animations: (A8) Engine Performance

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**ACTIVITIES:**

1. Task Sheet: Locate Shorts, Grounds, and Opens

2. Chapter PowerPoint

3. 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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