**Automotive Technology 7th Edition**

**Chapter 42 – Wiring Schematics and Circuit Testing**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Wiring Schematics and Symbols, Schematic Symbols, and Relay Terminal 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: Diagnose Electrical/Electronic Circuits

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

3. Chapter PowerPoint

4. Crossword Puzzle and Word Search

5. Videos: [(A6) Electrical/Electronic Systems Videos](https://jameshalderman.com/a6_vid_lib_page/)

6. Animations: [(A6) Electrical/Electronic Systems Animations](https://jameshalderman.com/a6_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Diagnose Electrical/Electronic Circuits

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

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. Review and group discussion of the five (5) chapter Review Questions.

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**NOTES AND EVALUATION:**

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