**Automotive Technology 6th Edition**

**Chapter 45 –** **Wiring Schematics and Circuit Testing**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Wiring schematics and symbols

2. Relay terminal identification, locating an open circuit, and common power or ground

3. Circuit troubleshooting procedure and locating a short circuit

4. Electrical troubleshooting guide and step-by-step troubleshooting procedure

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**OBJECTIVES:**

1. Interpret wiring schematics and explain the procedure to identify relay terminals.

2. Locate shorts, grounds, opens, and resistance problems in electrical circuits, and determine necessary action.

3. Explain the different methods to locate a short circuit, and the procedure to troubleshoot an electrical problem.

4. This chapter will help you prepare for the ASE electrical/electronic Systems (A6) certification test content area “A” (General Electrical/Electronic System diagnosis).

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**RESOURCES:** (All resources may be found at <http://www.jameshalderman.com>) Internet access required to hyperlink.

**1.** **Task Sheet ASE** **(A6-A-4) P-1**: Diagnose Electrical/Electronic Circuits

**2**. **Task Sheet ASE (A6-A-4) P-1**: Locate Shorts, Grounds, and Opens

3. Chapter PowerPoint

4. Chapter 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** **ASE (A6-A-4) P-1:** Have students complete Diagnose Electrical/Electronic Circuits Task Sheet.

**2.** **Task Sheet ASE (A6-A-4) P-1**: Have students complete Locate Shorts, Grounds, and Opens Task Sheet.

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**ASSIGNMENTS:**

1. Chapter crossword and word search puzzles.

2. Complete end of chapter 10 question quiz.

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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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