

Automotive Electricity and Electronics

Chapter 12 – 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 Procedure
 3. Locating a Short Circuit, 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.
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RESOURCES: ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Identify/Interpret Electrical Systems Concerns
 2. Task Sheet: Diagnose Electrical/Electronic Circuits
 3. Task Sheet: Use Wiring Diagrams to Diagnose a Circuit
 4. Task Sheet: Electrical Fault Diagnosis
 5. Chapter PowerPoint
 6. [Crossword and Word Search Puzzles \(A6\)](#)
 7. [Videos: \(A6\) Electrical/Electronic Systems](#)
 8. [Animations: \(A6\) Electrical/Electronic Systems](#)
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ACTIVITIES:

1. Task Sheet: Identify/Interpret Electrical Systems Concerns
 2. Task Sheet: Diagnose Electrical/Electronic Circuits
 3. Task Sheet: Use Wiring Diagrams to Diagnose a Circuit
 4. Task Sheet: Electrical Fault Diagnosis
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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:
