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

### **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
- 6. Animations: (A6) Electrical/Electronic Systems Animations

## DEMO

### **ACTIVITIES:**

- 1. Task Sheet: Diagnose Electrical/Electronic Circuits
- 2. Task Sheet: Locate Shorts, Grounds, and Opens
- 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:**

