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

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

ACTIVITIES:



- 1. Task Sheet: Locate Shorts, Grounds, and Opens
- 2. Chapter PowerPoint
- 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 <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.
- 2. Ten (10) question end of Chapter Quiz.
- 3. Five (5) end of chapter Review Question for class discussion.

NOTES AND EVALUATION:



