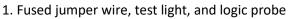
# Automotive Technology 6<sup>th</sup> Edition Chapter 42 – Circuit Testers and Digital Meters Lesson Plan

#### CHAPTER SUMMARY:



- 2. Digital multimeters and inductive meters
- 3. Diode check, duty cycle, and frequency
- 4. Electric unit prefixes and how to read digital meters



### **OBJECTIVES**:

- 1. Discuss how to safely set up and use a fused jumper wire, a test light, and a logic probe.
- 2. describe the uses of digital multimeters and inductive ammeters.
- 3. discuss diode check and frequency.
- 4. Describe the prefixes used with electrical units and how to read digital meters.

5. Explain how to safely use a digital meter to read voltage, resistance, and current, and compare to factory specifications.

6. This chapter will help you prepare for the ASE Electrical/ Electronic systems (A6) certification test content area "A" (General Electrical/Electronic System Diagnosis).



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

- 1. Task Sheet ASE (A6-A-3) P-1: Digital Multimeter Use for Electrical Problems
- 2. Task Sheet ASE (A6-A-5) P-1: Test Light Usage
- 3. Task Sheet ASE (A6-A-6) P-1: Circuit Testing Using a Fused Jumper Wire
- 4. Chapter PowerPoint
- 5. Chapter Crossword Puzzle and Word Search
- 6. Videos: (A6) Electrical/Electronic Systems Videos
- 7. Animations: (A6) Electrical/Electronic Systems Animations



#### ACTIVITIES:

1. Task Sheet ASE (A6-A-3) P-1: Have students complete Digital Multimeter Use for Electrical Problems Task Sheet

2. Task Sheet ASE (A6-A-5) P-1: Have students complete Test Light Usage Task Sheet.

**3. Task Sheet ASE (A6-A-6) P-1**: Have students complete Circuit Testing Using a Fused Jumper Wire Task Sheet.



#### ASSIGNMENTS:

- 1. Chapter crossword and word search puzzles.
- 2. Complete end of chapter 10 question quiz.



# Automotive Technology 6<sup>th</sup> Edition Chapter 42 – Circuit Testers and Digital Meters Lesson Plan



### **CLASS DISCUSSION:**

1. Review and group discussion chapter <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.

2. Review and group discussion of the five (5) chapter <u>Review Questions</u>.



## NOTES AND EVALUATION:

