## Automotive Technology 7<sup>th</sup> Edition Chapter 50 – Starting System Diagnosis and Service Lesson Plan

### **CHAPTER SUMMARY:**

- 1. Starting System Troubleshooting Procedure, Voltage Drop Testing, and Control Circuit Testing
- 2. Starter Amperage Test, Starter Removal, Bench Testing, and Starter Installation
- 3. Starter System Symptom Guide

### **OBJECTIVES**:

- 1. Explain the procedure to troubleshoot a starting system problem.
- 2. Discuss how to perform a voltage drop test on the cranking circuit.
- 3. Perform control circuit testing.
- 4. Perform a starter amperage test and determine necessary action.
- 5. Describe the procedure to remove a starter motor.
- 6. Explain starter motor bench testing.
- 7. Describe the procedure to install a starter motor.
- 8. Describe how to troubleshoot starting systems based on their symptoms.

**RESOURCES:** (All resources may be found at jameshalderman.com)

- 1. Task Sheet: Starter Disassembly and Testing
- 2. Task Sheet: Starter Solenoid Testing
- 3. Task Sheet: Starter Voltage Drop/Current Draw Tests
- 4. Task Sheet: Starter Relays and Solenoids
- 5. Task Sheet: Remove and Install the Starter
- 6. Chapter PowerPoint
- 7. Crossword Puzzle and Word Search
- 8. Videos: (A6) Electrical/Electronic Systems Videos
- 9. Animations: (A6) Electrical/Electronic Systems Animations

### ACTIVITIES:

- 1. Task Sheet: Starter Disassembly and Testing
- 2. Task Sheet: Starter Solenoid Testing
- 3. Task Sheet: Starter Voltage Drop/Current Draw Tests
- 4. Task Sheet: Starter Relays and Solenoids
- 5. Task Sheet: Remove and Install the Starter
- 6. Crossword Puzzle and Word Search

# \*\*\*\*

DEMO

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



#### HALDERMAN WWW.JAMESHALDERMAN.COM

## Automotive Technology 7<sup>th</sup> Edition Chapter 50 – Starting System Diagnosis and Service Lesson Plan

NOTES AND EVALUATION:



