

Automotive Technology 6th Edition

Chapter 52 – Cranking System

Lesson Plan

CHAPTER SUMMARY:



1. Cranking circuit and computer-controlled starting
 2. Starter motor operation, how the starter motor works, and gear-reduction starters
 3. Starter drives and starter solenoids
 4. Stop-start systems
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OBJECTIVES:



1. Describe the parts and operation of a cranking circuit and explain computer-controlled starting.
 2. Discuss how a starter motor converts electrical power into mechanical power.
 3. List the different types of starters motors.
 4. Describe gear reduction starters. Describe the function of starter drives and solenoids.
 5. This chapter will help prepare for the ASE Electrical/Electronic Systems (A6) certification test content area “C” (Starting System Diagnosis and Repair).
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RESOURCES: (All resources may be found at <http://www.jameshalderman.com>)



1. **Task Sheet ASE (A6-A-1) P-1:** Cranking System Identification
 2. Chapter PowerPoint
 3. Chapter Crossword Puzzle and Word Search
 4. Animations: Starter Circuit and Starter Circuit
 5. Animations: Starter Circuit Neutral Safety Switch
 6. Videos: Starting system and wiring diagram (time 3:43)
 7. Videos: Ignition key and transponders (time 3:19) and Starter (time 5:32)
 8. Videos: Solenoid wiring diagrams (time 3:06)
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ACTIVITIES:



1. **Task Sheet ASE (A6-A-1) P-1:** Have students complete Cranking System Identification Task Sheet.
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ASSIGNMENTS:



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

