

Automotive Heating and Air Conditioning 9th Edition

Chapter 4 – Air-Conditioning Compressors and Service

Lesson Plan



CHAPTER SUMMARY:

1. Compressors, Piston Compressors, Vane Compressors, and Scroll Compressors
 2. Compressor Clutches, Compressor Lubrication, and Filters and Mufflers
 3. Compressor Valves and Switches, and AC Compressor Diagnosis and Service
 4. Replacement Parts
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OBJECTIVES:

1. Prepare for ASE Heating and Air Conditioning (A7) certification test content area “B” (Refrigeration System Component Diagnosis and Repair).
 2. State the different types of A/C compressors.
 3. Discuss the parts and operation of compressor clutches.
 4. Discuss compressor valves and switches.
 5. Explain A/C compressor diagnosis and service.
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RESOURCES: ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Inspect Belts and Hoses
 2. Task Sheet: A/C Compressor Clutch Control Diagnosis
 3. Task Sheet: Air Conditioning Compressor Service
 4. Task Sheet: Air Conditioning System Control Devices
 5. Task Sheet: A/C Compressor Control System Diagnosis
 6. Chapter PowerPoint
 7. [Crossword Puzzle and Word Search \(A7\)](#)
 8. [Videos: \(A7\) Heating & Air Conditioning](#)
 9. [Animations: \(A7\) Heating & Air Conditioning](#)
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ACTIVITIES:

1. Task Sheet: Inspect Belts and Hoses
 2. Task Sheet: A/C Compressor Clutch Control Diagnosis
 3. Task Sheet: Air Conditioning Compressor Service
 4. Task Sheet: Air Conditioning System Control Devices
 5. Task Sheet: A/C Compressor Control System Diagnosis
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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.
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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:

