

Automotive Technology 7th Edition

Chapter 61 – Air-Conditioning Compressors and Service

Lesson Plan



CHAPTER SUMMARY:

1. Compressors and Condensers, Thermal Expansion Valves, Orifice Tube Systems, and Evaporators
2. Receiver-Drier and Accumulators, Lines and Hoses, and Electrical Switches and Evaporator Temp. Controls
3. Rear A/C Systems, and Component Replacement Procedures



OBJECTIVES:

1. Discuss the purpose and function of compressors and condensers.
2. Describe the operation of thermal expansion valves.
3. Explain the construction and operation of orifice tubes.
4. Explain the purpose and function of evaporators.
5. Explain the purpose and function of accumulators.
6. Discuss the use of lines and hoses in refrigeration.
7. Describe electrical switches and evaporator temperature controls used in A/C systems.
8. Describe rear A/C systems.
9. Explain component replacement procedures.



RESOURCES: (All resources may be found at 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
8. Videos: [\(A7\) Heating & Air Conditioning Videos](#)
9. Animations: [\(A7\) Heating & Air Conditioning Animations](#)



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
6. 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.

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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:
