

Automotive Technology 7th Edition

Chapter 66 – Air-Conditioning System Diagnosis and Service

Lesson Plan



CHAPTER SUMMARY:

1. Diagnostic Procedure, Verify Customer Concern, Visual Inspection, Check DTCs, and Check TSBs
2. Perform A/C Performance Test, Root Cause, Addressing System Odors, and Noise Issues
3. Repair the System, and Leak Detection,



OBJECTIVES:

1. Describe the eight-step diagnostic procedure for an A/C system.
2. Discuss the importance of verifying the customer concern.
3. Describe the visual inspection.
4. Explain how to check DTCs.
5. Explain how to check TSBs.
6. Discuss how to perform an A/C performance test.
7. Describe how to find the root cause of a customer concern.
8. Describe how to address system odor issues.
9. Describe how to address noise issues.
10. Describe how to repair a problem in an A/C system.
11. Explain how to locate refrigerant leaks.



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

1. Task Sheet: Retrieve and Record Diagnostic Trouble Codes
2. Task Sheet: Air Conditioning Noise Diagnosis
3. Task Sheet: Performance Test Heating and A/C System
4. Task Sheet: Evaporator Housing Drain
5. Task Sheet: Remove and Install Evaporator
6. Task Sheet: Identify Source of A/C Odors
7. Chapter PowerPoint
8. Crossword Puzzle and Word Search
9. Videos: [\(A7\) Heating & Air Conditioning Videos](#)
10. Animations: [\(A7\) Heating & Air Conditioning Animations](#)



ACTIVITIES:

1. Task Sheet: Retrieve and Record Diagnostic Trouble Codes
2. Task Sheet: Air Conditioning Noise Diagnosis
3. Task Sheet: Performance Test Heating and A/C System
4. Task Sheet: Evaporator Housing Drain
5. Task Sheet: Remove and Install Evaporator
6. Task Sheet: Identify Source of A/C Odors
7. 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.

NOTES AND EVALUATION:

