

# Automotive Heating and Air Conditioning 9<sup>th</sup> Edition

## Chapter 14 – A/C Inspection, Performance Testing, and Leak Detection

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Inspection, HVAC System Inspection, and A/C Service Ports
  2. A/C Performance Test and Leak Detection
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#### **OBJECTIVES:**

1. Prepare for the ASE Heating and Air Conditioning (A7) certification test content area “A” (A/C System Service, Diagnosis, and Repair).
  2. Describe the eight-step diagnostic procedure for an A/C system.
  3. Explain how to perform a visual inspection of an A/C system.
  4. Discuss how to perform an A/C performance test.
  5. Describe how to determine the root cause of the problem in an A/C system.
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#### **RESOURCES:** ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: A/C Performance Test
  2. Task Sheet: Leak Test the Air Conditioning System
  3. Task Sheet: Inspect the A/C Condenser for Proper Airflow
  4. Chapter PowerPoint
  5. [Crossword Puzzle and Word Search \(A7\)](#)
  6. [Videos: \(A7\) Heating & Air Conditioning](#)
  7. [Animations: \(A7\) Heating & Air Conditioning](#)
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#### **ACTIVITIES:**

1. Task Sheet: A/C Performance Test
  2. Task Sheet: Leak Test the Air Conditioning System
  3. Task Sheet: Inspect the A/C Condenser for Proper Airflow
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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:**

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