Automotive Technology 7th Edition Chapter 65 – Refrigerant Recovery, Recycling, and Recharging Lesson Plan

CHAPTER SUMMARY:



- 1. Safety First, SAE J Standards, Refrigerant Identification, A/C Servicing, and Refrigerant Recovery
- 2. Recycling Refrigerant, Flushing an A/C System, Replacing Components, and Inline Filter
- 3. Evacuating the System, Recharging the System, and Sealants and Stop Leaks

OBJECTIVES:



- 1. Explain A/C service safety practices.
- 2. Explain SAE J standards.
- 3. Discuss the procedure for identifying refrigerants in an A/C system.
- 4. Describe the steps involved in A/C servicing.
- 5. Explain the procedure for refrigerant recovery.
- 6. Explain the procedure for recycling refrigerant.
- 7. Discuss the purpose of flushing an A/C system.
- 8. Describe component replacement including in-line filter and refrigerant oil.
- 9. Explain the procedure for evacuating an A/C system.
- 10. Explain the procedure for recharging an A/C system.
- 11. Discuss sealants and stop leaks.



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

- 1. Task Sheet: Recycle Refrigerant
- 2. Task Sheet: Refrigerant Handling Equipment
- 3. Task Sheet: Refrigerant Identification/ Read Pressures
- 4. Task Sheet: Evacuate and Charge A/C System
- 5. Chapter PowerPoint
- 6. Crossword Puzzle and Word Search
- 7. Videos: (A7) Heating & Air Conditioning Videos
- 8. Animations: (A7) Heating & Air Conditioning Animations



ACTIVITIES:

- 1. Task Sheet: Recycle Refrigerant
- 2. Task Sheet: Refrigerant Handling Equipment
- 3. Task Sheet: Refrigerant Identification/ Read Pressures
- 4. Task Sheet: Evacuate and Charge A/C System
- 5. 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.



CLASS DISCUSSION:

- 1. Review and group discussion chapter <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.
- 2. Review and group discussion of the five (5) chapter Review Questions.

NOTES AND EVALUATION:



