

Automotive Technology 6th Edition

Chapter 65 – Automatic Air-Conditioning Systems Operation

Lesson Plan



CHAPTER SUMMARY:

1. Airflow management and automatic air conditioning
 2. Actuators, cabin filters, vacuum control circuits, and electric servomotor circuits
 3. Blower motor controls, dual-zone climate controls, and rear air-conditioning systems
 4. Recirculation operation and hybrid electric vehicle heating and cooling systems
-



OBJECTIVES:

1. Explain airflow management and the sensors and actuators used in automatic air conditioning.
 2. Discuss the filters and controls used in automatic air conditioning.
 3. Explain dual-zone climate controls, rear air-conditioning system operation, and recirculation operation.
 4. Describe how hybrid electrical vehicle heating and cooling systems are different from conventional systems.
-



RESOURCES: (All resources may be found at <http://www.jameshalderman.com>)

1. **Task Sheet ASE (A7-D-8) P-2:** Automatic/Dual Climate System ID
 2. **Task Sheet ASE (A7-D-8) P-2:** Automatic AC System Operation
 3. Chapter PowerPoint
 4. Chapter Crossword Puzzle and Word Search
 5. Animations: Automatic Temperature Control - ATC Sun Load
 6. Animations: Automatic Temperature Control - ATC Temperature – Heat
 7. Animations: Automatic Temperature Control - ATC Air Quality
 8. Animations: Automatic Temperature Control - ATC Temperature – Cool - Adjust
 9. Animations: Automatic Temperature Control - ATC Temperature – Cool
 10. Animations: Automatic Temperature Control - ATC Temperature – Humidity
 11. Animations: Compressor Temperature Sensor
 12. Videos: Audi A8 Automatic Climate Control (time 5:02)
-



ACTIVITIES:

1. **Task Sheet ASE (A7-D-8) P-2:** Have students complete Automatic/Dual Climate System ID Task Sheet.
 2. **Task Sheet ASE (A7-D-8) P-2:** Have students complete Automatic AC System Operation Task Sheet.
-



ASSIGNMENTS:

1. Chapter crossword and word search puzzles.
 2. Complete end of chapter 10 question quiz.
-



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](#).
-

Automotive Technology 6th Edition
Chapter 65 – Automatic Air-Conditioning Systems Operation
Lesson Plan

NOTES AND EVALUATION:


