**Automotive Heating and Air Conditioning 9th Edition**

**Chapter 10 – Heating System Operation and Diagnosis**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Heating System, Dual Heating Systems, Heater Diagnosis, and Electrically Heated Seats

2. Heated and Cooled Seats and Heated Steering Wheel

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**OBJECTIVES:**

1. Prepare for the ASE Heating and Air Conditioning (A7) certification test content area “C” (Heating and Engine Cooling Systems Diagnosis and Repair).

2. Discuss the operation of heating systems

3. Discuss the diagnosis of heating systems.

4. Explain the operation of electrically heated seats.

5. Explain the operation of heated and cooled seats.

6. Explain the operation of the heated steering wheel.

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**RESOURCES:** [(All resources may be found at jameshalderman.com)](https://jameshalderman.com/)

1. Task Sheet: Heater System Service

2. Task Sheet: Cooling and Heater Hose Inspection

3. Task Sheet: Heater Core Replacement

4. Chapter PowerPoint

5. [Crossword Puzzle and Word Search (A7)](https://jameshalderman.com/a7_puzzles_lib_page/)

6. [Videos: (A7) Heating & Air Conditioning](https://jameshalderman.com/a7_vid_lib_page/)

7. [Animations: (A7) Heating & Air Conditioning](https://jameshalderman.com/a7_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Heater System Service

2. Task Sheet: Cooling and Heater Hose Inspection

3. Task Sheet: Heater Core Replacement

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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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