Automotive Technology 7th Edition Chapter 30 – Pistons, Rings, and Connecting Rods Lesson Plan

CHAPTER SUMMARY:



- 1. Pistons, Piston Construction, Piston Pins, Piston Pin Retaining Methods, and Piston Rings
- 2. Piston Ring Construction, Connecting Rod, Connecting Rod Service and Piston and Rod Assembly
- 3. Piston Ring Service

OBJECTIVES:



- 1. Explain the purpose and function of pistons.
- 2. Explain piston construction.
- 3. Discuss piston pins.
- 4. Discuss piston pin retaining methods.
- 5. Explain piston rings.
- 6. Discuss piston ring construction.
- 7. Discuss connecting rods.
- 8. Discuss connecting rod service.
- 9. Explain piston and rod assembly.
- 9. Explain piston ring service.



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

- 1. Task Sheet: Connecting Rod Specification/Measurements
- 2. Task Sheet: Piston and Bearing Wear Patterns
- 3. Task Sheet: Piston Inspection and Measurement
- 4. Task Sheet: Piston Rings Installation
- 5. Chapter PowerPoint
- 6. Crossword Puzzle and Word Search
- 7. Videos: (A1) Engine Repair Videos
- 8. Animations: (A1) Engine Repair Animations



ACTIVITIES:

- 1. Task Sheet: Connecting Rod Specification/Measurements
- 2. Task Sheet: Piston and Bearing Wear Patterns
- 3. Task Sheet: Piston Inspection and Measurement
- 4. Task Sheet: Piston Rings Installation
- 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.



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NOTES AND EVALUATION:



