**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

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**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](https://jameshalderman.com/a1_vid_lib_page/)

8. Animations: [(A1) Engine Repair Animations](https://jameshalderman.com/a1_anim_lib_page/)

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**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

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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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