**Automotive Engines Theory and Servicing 10th Edition**

**Chapter 5 – Hand Tools**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Wrenches, Ratchets, Sockets, and Extensions, Screwdrivers, Hammers and Mallets, and Pliers

2. Cutters, Punches and Chisels, Removers, Hacksaws, Basic Hand Tool List, and Tool Sets and Accessories

3. Specialty Tools, Electrical Hand Tools, and Safety Tips for Using Hand Tools

4. Hand Tool Maintenance

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**OBJECTIVES:**

1. Compare the different types of wrenches.

2. Discuss the purpose of ratchets, sockets, and extensions, and screwdrivers.

3. Discuss the purpose of hammers, mallets, and pliers.

4. Explain the characteristics of cutters, punches, chisels, re-movers, and hacksaws.

5. List the basic tools a service technician should possess.

6. Describe the purpose of specialty tools such as seal pullers, seal drivers, and electrical hand tools.

7. Discuss the safety tips for using hand tools and hand tool maintenance.

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

1. Task Sheet: Hand Tool Identification

2. Chapter PowerPoint

3. [Crossword Puzzle and Word Search](https://jameshalderman.com/a0_puzzles_lib_page/) (A0)

4. [Videos: (A0) Automotive Fundamentals](https://jameshalderman.com/a0_vid_lib_page/)

5. [Animations: (A0) Automotive Fundamentals](https://jameshalderman.com/a0_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Hand Tool Identification

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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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