

Automotive Technology 7th Edition

Chapter 15 – Gasoline Engine Operation, Parts, and Specifications

Lesson Plan



CHAPTER SUMMARY:

1. Purpose and Function, Energy and Power, and Engine Construction and Overview
2. Engine Parts and Systems, Four-Stroke Cycle Operation, and Engine Classification and Construction
3. Engine Measurement, Compression Ratio, and Torque and Horsepower



OBJECTIVES:

1. Discuss the engine's purpose and function.
2. Explain how engines use energy and power.
3. Discuss engine construction.
4. Explain engine parts and systems.
5. Explain four-stroke cycle operation.
6. Discuss engine classification and construction.
7. Explain engine measurement.
8. Discuss compression ratio.
9. Discuss compression, torque, and horsepower.



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

1. Task Sheet: Hybrid Vehicle ICE Service Precautions
2. Task Sheet: Gasoline Engine Identification
3. Task Sheet: General Engine Specification
4. Chapter PowerPoint
5. Crossword Puzzle and Word Search
6. Videos: [\(A1\) Engine Repair Videos](#)
7. Animations: [\(A1\) Engine Repair Animations](#)



ACTIVITIES:

1. Task Sheet: Hybrid Vehicle ICE Service Precautions
2. Task Sheet: Gasoline Engine Identification
3. Task Sheet: General Engine Specification
4. 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 [Frequently Asked Questions](#) and [Tech Tips](#) sections.
2. Review and group discussion of the five (5) chapter [Review Questions](#).



NOTES AND EVALUATION: