

Automotive Engines Theory and Servicing 10th Edition

Chapter 9 – Gasoline Engine Operation, Parts, and Specification

Lesson Plan



CHAPTER SUMMARY:

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

1. Discuss the engine's purpose and function, energy and power, and engine construction.
 2. Explain engine parts and systems.
 3. Explain four-stroke cycle operation.
 4. Discuss engine classification and construction.
 5. Explain engine measurement.
 6. Discuss compression ratio, torque, and horsepower.
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RESOURCES: ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Hybrid Vehicle ICE Service Precautions
 2. Task Sheet: Remove Cylinder Head(s) & Inspect
 3. Task Sheet: Engine Block Disassembly
 4. Task Sheet: Oil Pressure Measurement
 5. Chapter PowerPoint
 6. [Crossword Puzzle and Word Search \(A1\)](#)
 7. [Crossword Puzzle and Word Search \(A8\)](#)
 8. [Videos: \(A1\) Engine Repair](#)
 9. [Videos: \(A8\) Engine Performance](#)
 10. [Animations: \(A1\) Engine Repair](#)
 11. [Animations: \(A8\) Engine Performance](#)
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ACTIVITIES:

1. Task Sheet: Hybrid Vehicle ICE Service Precautions
 2. Task Sheet: Remove Cylinder Head(s) & Inspect
 3. Task Sheet: Engine Block Disassembly
 4. Task Sheet: Oil Pressure Measurement
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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:


