

Automotive Engines Theory and Servicing 10th Edition

Chapter 19 – Intake and Exhaust Systems

Lesson Plan



CHAPTER SUMMARY:

1. Air Intake Filtration, Intake Manifolds, Intake Manifold Design, and Variable Intake Manifolds
 2. Exhaust Gas Recirculation Passages, Exhaust Manifolds, Exhaust System Components, and Mufflers
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OBJECTIVES:

1. Explain air intake filtration.
 2. Discuss the throttle-body injection intake manifolds and port fuel-injection intake manifolds.
 3. Describe the purpose and function of variable intake manifolds.
 4. Discuss exhaust gas recirculation passages and exhaust manifolds.
 5. Describe the purpose and function of exhaust system components.
 6. Describe the purpose and function of mufflers.
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RESOURCES: ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Port Fuel – Injection Intake Manifold Identification
 2. Chapter PowerPoint
 3. [Crossword Puzzle and Word Search \(A8\)](#)
 4. [Videos: \(A8\) Engine Performance](#)
 5. [Animations: \(A8\) Engine Performance](#)
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ACTIVITIES:

1. Task Sheet: Port Fuel – Injection Intake Manifold 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:
