

Automotive Technology 7th Edition

Chapter 21 – Intake and Exhaust Systems

Lesson Plan



CHAPTER SUMMARY:

1. Air Intake Filtration, Intake Manifolds, Intake Manifold Design, and Variable Intake Manifolds
2. Exhaust Manifolds and Exhaust System Components



OBJECTIVES:

1. Explain air intake filtration.
2. Define intake manifolds.
3. Discuss the design and construction of intake manifolds.
4. Describe the purpose and function of variable intake manifolds.
5. Discuss exhaust gas recirculation passages.
6. Discuss exhaust manifolds.
7. Describe the purpose and function of exhaust system components.



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

1. Task Sheet: Port Fuel – Injection Intake Manifold Identification
2. Task Sheet: Exhaust System Inspection
3. Task Sheet: Intake Manifold Gasket Replacement
4. Chapter PowerPoint
5. Crossword Puzzle and Word Search
6. Videos: [\(A1\) Engine Repair Videos](#)
7. Videos: [\(A8\) Engine Performance Videos](#)
8. Animations: [\(A1\) Engine Repair Animations](#)
9. Animations: [\(A8\) Engine Performance Animations](#)



ACTIVITIES:

1. Task Sheet: Port Fuel – Injection Intake Manifold Identification
2. Task Sheet: Exhaust System Inspection
3. Task Sheet: Intake Manifold Gasket Replacement
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: