**Automotive Technology 6th Edition**

**Chapter 24 –** **Intake and Exhaust Systems**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Air intake filtration and fuel-injection intake manifolds

2. Intake manifold design, variable intake manifolds, and exhaust gas recirculation passages

3. 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. Discuss exhaust gas recirculation passages and exhaust manifolds.

4. Describe the purpose and function of mufflers.

5. Describe the purpose and function of variable intake manifolds.

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**RESOURCES:** (All resources may be found at <http://www.jameshalderman.com>) Internet access required to hyperlink.

**1.** **Task Sheet ASE (A8-D-10) P-1:** Exhaust System Inspection

**2. Task Sheet ASE (A8-D-9) P-1**: Intake Manifold Gasket Replacement

3. Chapter PowerPoint

4. Chapter Crossword Puzzle and Word Search

5. Videos: [(A1) Engine Repair Videos](https://jameshalderman.com/a1_vid_lib_page/)

6. Videos: [(A8) Engine Performance Videos](https://jameshalderman.com/a8_vid_lib_page/)

7. Animations: [(A1) Engine Repair Animations](https://jameshalderman.com/a1_anim_lib_page/)

8. Animations: [(A8) Engine Performance Animations](https://jameshalderman.com/a8_anim_lib_page/)

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**ACTIVITIES:**

**1.** **Task Sheet** **ASE (A1 through A8-A-2) P-1:** Have students complete Exhaust System Inspection Task Sheet.

**2.** **Task Sheet ASE (A8-D-9) P-1**: Have students complete Intake Manifold Gasket Replacement Task Sheet.

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**ASSIGNMENTS:**

1. Chapter crossword and word search puzzles.

2. Complete end of chapter 10 question quiz.

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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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