

Automotive Technology 7th Edition

Chapter 24 – In-Vehicle Engine Service

Lesson Plan



CHAPTER SUMMARY:

1. Thermostat Replacement, Water Pump Replacement, and Intake Manifold Gasket Inspection
2. Intake Manifold Gasket Replacement, Timing Belt Replacement, and Hybrid Engine Precautions
3. Gasoline Direct Injection Concerns



OBJECTIVES:

1. Explain thermostat replacement in engines.
2. Explain water pump replacement in engines.
3. Discuss intake manifold gasket inspection.
4. Discuss intake manifold gasket replacement.
5. Describe the steps involved in timing belt replacement.
6. Discuss hybrid engine precautions.
7. Discuss gasoline direct-injection engine concerns.



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

1. Task Sheet: Replace Water Pump II
2. Task Sheet: Inspect and Replace Timing Chain(s) and Gears
3. Task Sheet: Adjust Valves
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: Replace Water Pump II
2. Task Sheet: Inspect and Replace Timing Chain(s) and Gears
3. Task Sheet: Adjust Valves
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: