

Automotive Technology 7th Edition

Chapter 28 – Camshaft and Valve Trains

Lesson Plan



CHAPTER SUMMARY:

1. Camshafts, Camshaft Design, Camshaft Drives, Camshaft Movement, Rocker Arms, and Pushrods
2. Lifters and Tappets, Overhead Camshaft Valve Trains, and Valve Train Lubrication
3. Valve Train Problem Diagnosis, Camshaft Specifications, Camshaft Removal, and Measuring Camshafts



OBJECTIVES:

1. Describe the purpose and function of the camshaft.
2. Describe camshaft design.
3. Discuss camshaft drives.
4. Discuss camshaft movement.
5. Discuss rocker arms.
6. Discuss pushrods.
7. Discuss tappets.
8. Explain overhead camshaft valve trains.
9. Explain valve train lubrication.
10. Explain valve train problem diagnosis.
11. Explain camshaft specifications.
12. Explain how to remove a camshaft.
13. Explain how to measure a camshaft.



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

1. Task Sheet: Camshaft Specification
2. Task Sheet: Valve Train Inspection
3. Task Sheet: Valve Lifter Inspection
4. Task Sheet: Valve Adjustment II
5. Task Sheet: Camshaft Inspection
6. Task Sheet: Camshaft Bearing Surface Inspection
7. Task Sheet: Camshaft Position Sensor & Reluctor Ring
8. Chapter PowerPoint
9. Crossword Puzzle and Word Search
10. Videos: [\(A1\) Engine Repair Videos](#)
11. Animations: [\(A1\) Engine Repair Animations](#)



ACTIVITIES:

1. Task Sheet: Camshaft Specification
2. Task Sheet: Valve Train Inspection
3. Task Sheet: Valve Lifter Inspection
4. Task Sheet: Valve Adjustment II
5. Task Sheet: Camshaft Inspection
6. Task Sheet: Camshaft Bearing Surface Inspection
7. Task Sheet: Camshaft Position Sensor & Reluctor Ring
8. Crossword Puzzle and Word Search

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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.



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:
