

Automotive Steering, Suspension & Alignment

Chapter 12 – Steering Columns and Gears

Lesson Plan



CHAPTER SUMMARY:

1. Steering Wheels, Steering Wheel Removal, Steering Columns, and Conventional Steering Gears
 2. Recirculation Ball Steering Gear, Steering Gear Adjustments, and Rack-And-Pinion Steering Gear
 3. Rack-And-Pinion Adjustments
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OBJECTIVES:

1. Describe the purpose and function of a steering wheel.
 2. Explain how to remove a steering wheel.
 3. Discuss steering columns and intermediate shafts.
 4. Explain the purpose and function of conventional steering gears.
 5. Explain how a recirculating ball steering gear works.
 6. Describe how a rack-and-pinion steering gear works.
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RESOURCES: ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Electronic Airbag System and Steering Wheel Service
 2. Task Sheet: Steering Column Related Diagnosis
 3. Task Sheet: Steering Gear Adjustment/Replacement
 4. Chapter PowerPoint
 5. [Crossword and Word Search Puzzles \(A4\)](#)
 6. [Videos: \(A4\) Suspension and Steering](#)
 7. [Animations: \(A4\) Suspension and Steering](#)
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ACTIVITIES:

1. Task Sheet: Electronic Airbag System and Steering Wheel Service
 2. Task Sheet: Steering Column Related Diagnosis
 3. Task Sheet: Steering Gear Adjustment/Replacement
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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:
