

# Automotive Chassis Systems 8<sup>th</sup> Edition

## Chapter 31 – Hydraulic Power Steering Systems

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Hydraulic Power Steering Systems and Power Steering Pump and Reservoir
  2. Integral Power Steering, Variable-Effort Steering, and Power Steering Diagnosis
  3. Power Steering Fluid
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#### **OBJECTIVES:**

1. Describe the operation of hydraulic power steering systems.
  2. Discuss the components and operation of power steering pumps.
  3. Explain the purpose and function of integral power steering.
  4. Discuss the purpose and function of variable effort steering systems.
  5. Discuss power steering diagnosis and troubleshooting.
  6. Describe service of power steering components and fluid.
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#### **RESOURCES:** ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Steering Gear Diagnosis
  2. Task Sheet: Power Steering Fluid
  3. Task Sheet: Diagnose Power Steering Fluid Leakage
  4. Task Sheet: Power Steering Pump Belt
  5. Task Sheet: Service Power Steering Pump
  6. Task Sheet: Inspect Power Steering Hoses and Fittings
  7. Task Sheet: Test Power Steering System Pressure
  8. [Crossword Puzzle and Word Search](#)
  9. [Videos: ASE A4 Suspension and Steering](#)
  10. [Animations: ASE A4 Suspension and Steering](#)
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#### **ACTIVITIES:**

1. Task Sheet: Steering Gear Diagnosis
  2. Task Sheet: Power Steering Fluid
  3. Task Sheet: Diagnose Power Steering Fluid Leakage
  4. Task Sheet: Power Steering Pump Belt
  5. Task Sheet: Service Power Steering Pump
  6. Task Sheet: Inspect Power Steering Hoses and Fittings
  7. Task Sheet: Test Power Steering System Pressure
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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:**

