Automotive Steering, Suspension & Alignment Chapter 15 – Electric Power Steering Systems Lesson Plan

CHAPTER SUMMARY:



- 1. Electric Power Steering Overview, EPS System Parts and Operation, and Steering Shaft Torque Sensor
- 2. Steering Wheel Position Sensor, Power Steering Motor, and Power Steering Control Module (PSCM)
- 3. EPS Diagnosis, Self-Parking System, and Electrohydraulic Power Steering

OBJECTIVES:



- 1. Describe the purpose, function, and types of electric power steering systems.
- 2. Explain how electric power steering systems operate.
- 3. Discuss how to diagnose electric power steering system faults.
- 4. Describe the self-parking feature and its relationship to power steering.
- 5. Describe electrohydraulic power steering.



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

- 1. Task Sheet: Electronically Controlled Steering Systems
- 2. Task Sheet: Electric Power Steering
- 3. Task Sheet: HEV Power Steering Circuits Services
- 4. Chapter PowerPoint
- 5. Crossword and Word Search Puzzles (A4)
- 6. Videos: (A4) Suspension and Steering
- 7. Animations: (A4) Suspension and Steering

DEMO

ACTIVITIES:

- 1. Task Sheet: Electronically Controlled Steering Systems
- 2. Task Sheet: Electric Power Steering
- 3. Task Sheet: HEV Power Steering Circuits Services



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 <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.
- 2. Review and group discussion of the five (5) chapter Review Questions.



NOTES AND EVALUATION:

