**Electric & Hybrid Electric Vehicles 1st Edition**

**Chapter 5 – Hybrid and Electric Vehicle Preventative Maintenance**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Routine Service Procedures

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**OBJECTIVES:**

1. Describe routine service procedures for both hybrid and electric vehicles.

2. Explain how to place a hybrid vehicle in maintenance mode.

3. Describe the service cautions when changing the oil and filter on a hybrid vehicle.

4. Explain how to service the base brake system on a hybrid or electric vehicle.

5. List the different voltages at which hybrid and electric steering systems operate, and explain the safety precautions when performing service.

6. Explain the purpose of noise-reducing tires. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**RESOURCES:** [(All resources may be found at jameshalderman.com)](https://jameshalderman.com/)

1. Task Sheet: EV and HEV Preventative Maintenance

2. Task Sheet: HEV Test and Replace Coolant

3. Chapter PowerPoint

4. [Crossword Puzzle and Word Search (L3)](https://jameshalderman.com/l3_puzzles_lib_page/)

5. [Videos: (L3) Light Duty Hybrid Electric](https://jameshalderman.com/l3_vid_lib_page/)

6. [Animations: (L3) Light Duty Hybrid Electric](https://jameshalderman.com/l3_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: EV and HEV Preventative Maintenance

2. Task Sheet: HEV Test and Replace Coolant \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**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:**

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