

Automotive Technology 7th Edition

Chapter 86 – Hybrid and Electric Vehicle Safety

Lesson Plan



CHAPTER SUMMARY:

1. High-Voltage Safety, Electric Shock Potential, and Electric Vehicles in the Service Area
2. Personal Protective Equipment (PPE), and High-Voltage Tools and Equipment
3. Safety Interlock System, Depowering the High-Voltage System, Hoisting a Hybrid or Electric Vehicle
4. Moving a Hybrid or Electric Vehicle Around the Shop



OBJECTIVES:

1. Discuss high-voltage safety, electric shock potential, and EV/HEV service areas.
2. Discuss electric shock potential.
3. Discuss EV/HEV service areas.
4. Describe the personal protective equipment (PPE) recommended for working on EV/HEV systems.
5. Explain the tools and equipment needed for working on high-voltage electrical systems.
6. Explain the purpose of the safety interlock system.
7. Describe the process for depowering the high-voltage system.
8. Discuss precautions that are needed when hoisting an EV/HEV in the shop.
9. Discuss precautions that are needed when moving an EV/HEV in the shop.



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

1. Task Sheet: High Voltage Circuit Identification
2. Task Sheet: Hybrid/ Electric Vehicle HV Circuit Disconnect
3. Chapter PowerPoint
4. Crossword Puzzle and Word Search
5. Videos: [\(L3\) Light Duty Hybrid Electric Videos](#)
6. Animations: [\(L3\) Light Duty Hybrid Electric Animations](#)



ACTIVITIES:

1. Task Sheet: High Voltage Circuit Identification
2. Task Sheet: Hybrid/ Electric Vehicle HV Circuit Disconnect
3. Crossword Puzzle and Word Search



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](#).

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NOTES AND EVALUATION:


