

# Automotive Technology 6<sup>th</sup> Edition

## Chapter 92 – Hybrid High-Voltage Batteries

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Hybrid auxiliary batteries and hybrid and electric vehicle high-voltage batteries
  2. Nickel-metal hydride batteries and lithium-ion high voltage batteries
  3. High-voltage battery and disconnect location and other high-voltage battery types
  4. Battery comparison, high-voltage battery monitor, and out-of-vehicle HV battery service
  5. High-voltage battery charging and high-voltage battery safety precautions
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#### **OBJECTIVES:**

1. State the purpose of the auxiliary battery in a hybrid vehicle.
  2. Explain the types of high-voltage batteries used in most hybrid electric vehicles.
  3. Describe the purpose of the high-voltage battery monitor.
  4. List the steps for servicing a high-voltage battery.
  5. Discuss high-voltage battery charging and safety precautions.
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**RESOURCES:** (All resources may be found at <http://www.jameshalderman.com>) Internet access required to hyperlink.

1. Chapter PowerPoint
  2. Chapter Crossword Puzzle and Word Search
  3. Videos: [\(L3\) Light Duty Hybrid Electric Videos](#)
  4. Animations: [\(L3\) Light Duty Hybrid Electric Animations](#)
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#### **ACTIVITIES:**

1. Have students visit a shop that maintains and repairs high voltage hybrid electric vehicles.
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#### **ASSIGNMENTS:**

1. Chapter crossword and word search puzzles.
  2. Complete end of chapter 10 question quiz.
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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:**