

Automotive Technology 6th Edition

Chapter 93 – Electric and Plug-In Hybrid Electric Vehicles

Lesson Plan

CHAPTER SUMMARY:



1. Plug-in hybrid electric vehicles and electric vehicles
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OBJECTIVES:



1. Identify a plug-in hybrid electric vehicle (PHEV) and explain how the high-voltage battery is recharged.
 2. Discuss the battery capacity and range correlation of an EV.
 3. Describe the levels of chargers used to charge a PHEV or an EV.
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RESOURCES: (All resources may be found at <http://www.jameshalderman.com>)



1. Chapter PowerPoint
 2. Chapter Crossword Puzzle and Word Search
 3. Animations: Parallel Hybrid, Regenerative Braking 2, and Series Hybrid
 4. Videos: Outlander PHEV bigger battery 19.5 kWh (time 2:51)
 5. Videos: Outlander PHEV Battery Disassembly (time 15:35)
 6. Videos: Mitsubishi Outlander PHEV – Technology (time 4:10)
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ACTIVITIES:



1. Have students visit a shop that maintains and repairs electric and plug-in 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:

