# Automotive Technology 6<sup>th</sup> Edition Chapter 85 – Evaporative Emission Control Systems Lesson Plan

#### **CHAPTER SUMMARY:**



- 1. Evaporative emission control system and nonenhanced evaporative control systems
- 2. Enhanced evaporative control systems and leak detection pump system
- 3. Onboard refueling vapor recovery, diagnosing the EVAP system, and onboard refueling vapor recovery
- 4. Diagnosing the EVAP system, evaporative system monitor, typical EVAP monitor, and EVAP DTC's



#### **OBJECTIVES:**

- 1. Explain the operation of an evaporative emission control system and compare enhanced and nonenhanced evaporative control (EVAP) systems.
- 2. Discuss leak detection pump systems and onboard refueling vapor recovery, and explain how to diagnose the EVAP system.
- 3. Discuss the functions of an evaporative system monitor.



**RESOURCES**: (All resources may be found at <a href="http://www.jameshalderman.com">http://www.jameshalderman.com</a>) Internet access required to hyperlink.

- 1. Task Sheet ASE (A8-E-5) P-2: EVAP System Component Inspection
- 2. Task Sheet ASE (A8-E-5) P-2: Evaporative Emission Controls Diagnosis
- 3. Task Sheet ASE (A8-E-7) P-3: Evaporative Emission DTC Diagnosis
- 4. Chapter PowerPoint
- 5. Chapter Crossword Puzzle and Word Search
- 6. Videos: (A8) Engine Performance Videos
- 7. Animations: (A8) Engine Performance Animations



## **ACTIVITIES:**

- 1. Task Sheet ASE (A8-E-5) P-2: Have students complete EVAP System Component Inspection Task Sheet.
- 2. Task Sheet ASE (A8-E-5) P-2: Have students complete Evaporative Emission Controls Diagnosis Task Sheet.
- 3. Task Sheet ASE (A8-E-7) P-3: Have students complete Evaporative Emission DTC Diagnosis Task Sheet.



## **ASSIGNMENTS:**

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



# **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:**



