Automotive Technology 6th Edition Chapter 89 – Onboard Diagnosis Lesson Plan



CHAPTER SUMMARY:

- 1. On-board diagnostics generation-II (OBD-II) systems and diagnostic executive and task manager
- 2. Monitors, OBD-II monitor information, enabling criteria, and OBD-II DTC numbering designation
- 3. OBD-II freeze-frame, enabling conditions, PCM tests, and global OBD-II mode
- 4. Diagnosing problems using mode six



OBJECTIVES:

- 1. Explain the purpose and function of systems.
- 2. List the various continuous and noncontinuous monitors.
- 3. Explain the numbering designation of OBD-II diagnostic trouble codes.
- 4. Explain the information captured by freeze-frame and the criteria to enable an OBD monitor.
- 5. Describe PCM tests related to OBD systems.
- 6. List the operation modes of a global scan tool.



RESOURCES: (All resources may be found at http://www.jameshalderman.com) Internet access required to hyperlink.

- 1. Task Sheet ASE (A8-A-2) P-1: OBD II Connector Identification
- 2. Task Sheet ASE (A8-B-1) P-1: Retrieving OBD II Diagnostic Trouble Codes
- 3. Task Sheet ASE (A8-B-1) P-1, (A8-B-4) P-1: OBD II Monitors Status
- 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-A-2) P-1: Have students complete OBD II Connector Identification Task Sheet.
- **2.** Task Sheet ASE (A8-B-1) P-1: Have students complete Retrieving OBD II Diagnostic Trouble Codes Task Sheet.
- 3. Task Sheet ASE (A8-B-1) P-1, (A8-B-4) P-1: Have students complete OBD II Monitors Status 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 <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.
- 2. Review and group discussion of the five (5) chapter Review Questions.



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NOTES AND EVALUATION:



