**Automotive Technology 7th Edition**

**Chapter 83 – 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 Numbering Designation

3. OBD-II Freeze-Frame, Enabling Conditions, PCM Tests, and Global OBD-II

4. Diagnosing Problems Using Mode Six.

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**OBJECTIVES:**

1. Explain the purpose and function of OBD systems.

2. Discuss the diagnostic executive.

3. List the various continuous and noncontinuous monitors.

4. Discuss OBD-II monitor information.

5. Explain enabling criteria.

6. Explain the numbering designation of OBD-II diagnostic trouble codes.

7. Explain the information captured by freeze-frame.

8. Describe the criteria to enable an OBD monitor.

9. Describe PCM tests related to OBD systems.

10. List the operation modes of a global scan tool.

11. Describe mode six diagnosis. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Task Sheet: OBD II Connector Identification

2. Task Sheet: Retrieving OBD II Diagnostic Trouble Codes

3. Task Sheets: OBD II Monitors Status

4. Crossword Puzzle and Word Search

5. Chapter PowerPoint

6. Videos: [(A8) Engine Performance Videos](https://jameshalderman.com/a8_vid_lib_page/)

7. Animations: [(A8) Engine Performance Animations](https://jameshalderman.com/a8_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: OBD II Connector Identification

2. Task Sheet: Retrieving OBD II Diagnostic Trouble Codes

3. Task Sheets: OBD II Monitors Status

4. Crossword Puzzle and Word Search

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**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.

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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:**

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