**Advanced Engine Performance Diagnosis 8th Edition**

**Chapter 9 – On-Board Diagnosis**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. On-Board Diagnostics Generation-II (OBD-II) Systems and OBD-II DTC Numbering Designation

2. OBD-II Freeze-Frame, Diagnostic Executive or Task Manager, and Monitors

3. Noncontinuous (Once-Per-Trip) Monitors

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**OBJECTIVES:**

1. Understand the purpose and function of on-board diagnostics generation-II OBD-II) systems.

2. Discuss the numbering designation of OBD-II diagnostic trouble codes.

3. List the types of information obtained from a freeze-frame.

4. Understand the information obtained from an on-board diagnostics monitor and the criteria to enable

an OBD monitor.

5. List the continuous monitors.

6. List the noncontinuous monitors. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Task Sheet: Drive Trace Pre-Conditioning

2. Task Sheet: OBD II Connector Identification

3. Task Sheet: Retrieving OBD II Diagnostic Trouble Codes

4. Task Sheet: Set Opposite Code

5. Task Sheet: Freeze Frame and MIL Activity

6. Task Sheet: Step-by-Step Diagnosis

7. Task Sheet: Fuel-Related Scan Data

8. Task Sheet: Misfire Monitor Activity

9. Task Sheet: I/M Monitors Status

10. Task Sheet: Repair Verification

11. Chapter PowerPoint

12. Crossword and Word Search Puzzles

13. Videos: (A8) General Engine Diagnosis

14. Animations: (A8) General Engine Diagnosis

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**ACTIVITIES:**

1. Task Sheet: Drive Trace Pre-Conditioning

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**Lesson Plan**

**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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