**Advanced Engine Performance Diagnosis 8th Edition**

**Chapter 18 – Electronic Throttle Control System**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Electronic Throttle Control (ETC) System and Normal Operation of the ETC System

2. APP Sensor, Throttle Body Assembly, Throttle Position (TP) Sensor, and Diagnosis of the ETC System

3. Servicing Electronic Throttle Systems

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**OBJECTIVES:**

1. Describe electronic throttle control systems.

2. Explain how an electronic throttle control system works.

3. Describe the APP sensor.

4. Describe the throttle body assembly.

5. Describe TP sensors.

6. Describe how to diagnose faults in an electronic throttle control system.

7. Explain how to service an electronic throttle system. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Task Sheet: Electronic Throttle Control System Identification

2. Task Sheet: Throttle Position Sensor Scope Test

3. Chapter PowerPoint

4. Crossword and Word Search Puzzles

5. Videos: (A8) Computerized Engine Controls Diagnosis and Repair

6. Animations: (A8) Computerized Engine Controls Diagnosis and Repair

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**ACTIVITIES:**

1. Task Sheet: Electronic Throttle Control System Identification

2. Task Sheet: Throttle Position Sensor Scope Test

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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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