

Automotive Electrical and Engine Performance - 9th edition

Ch40: Vehicle Emission Standards and Testing

Lesson Plan



CHAPTER SUMMARY:

1. Normal Engine Combustion, Exhaust Analysis and Combustion Efficiency, and Catalytic Converter
 2. Exhaust Analysis as a Diagnostic Tool, Engine Fault Possibilities, and Emission Standards
 3. Vehicle Emission Testing
-



OBJECTIVES:

1. Discuss normal engine combustion.
 2. Discuss exhaust analysis and combustion efficiency.
 3. Discuss the catalytic converter.
 4. Explain diagnosis using exhaust analysis.
 5. Explain engine fault possibilities.
 6. Discuss U.S. and European emission standards.
 7. Explain vehicle emission testing.
-



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

1. Task Sheet: Retrieve DTCs, Monitor Status & Freeze Frame
 2. Task Sheet: Testing Using a Scan Tool
 3. Crossword Puzzle and Word Search
 4. Videos: (A8) Engine Performance Videos
 5. Animations: (A8) Engine Performance Animations
-



ACTIVITIES:

1. Task Sheet: Retrieve DTCs, Monitor Status & Freeze Frame
 2. Task Sheet: Testing Using a Scan Tool
 3. Chapter PowerPoint
 4. Crossword Puzzle and Word Search
-



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.
-



CLASS DISCUSSION:

1. Review and group discussion chapter [Frequently Asked Questions](#) and [Tech Tips](#) sections.
 2. Ten (10) question end of [Chapter Quiz](#).
 3. Five (5) end of chapter [Review Question](#) for class discussion.
-

Automotive Electrical and Engine Performance - 9th edition
Ch40: Vehicle Emission Standards and Testing
Lesson Plan

NOTES AND EVALUATION:


