**Automotive Electrical and Engine Performance - 9th edition**

**Ch39: Turbocharging and Supercharging**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Forced Induction Principles, Super Chargers, Turbochargers, Turbocharger Failures, and Boost Control

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**OBJECTIVES:**

1. Discuss airflow requirements and volumetric efficiency of engines.

2. Explain forced induction principles.

3. Discuss superchargers.

4. Discuss turbochargers.

5. Discuss turbocharger failures.

6. Explain boost control. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Task Sheet: Test Operation of Turbocharger/Supercharger

2. Crossword Puzzle and Word Search

3. Videos: (A8) Engine Performance Videos

4. Animations: (A8) Engine Performance Animations

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**ACTIVITIES:**

1. Task Sheet: Test Operation of Turbocharger/Supercharger

2. Chapter PowerPoint

3. 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. Ten (10) question end of Chapter Quiz.

3. Five (5) end of chapter Review Question for class discussion.

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**NOTES AND EVALUATION:**

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