Automotive Technology 6th Edition
Chapter 25 – Turbocharging and Supercharging
Lesson Plan

CHAPTER SUMMARY:

1. Forced induction principles
2. Superchargers and turbochargers
3. Boost control, turbocharger failures, and nitrous oxide

OBJECTIVES:

1. Discuss airflow requirements and volumetric efficiency of engines.
2. Explain forced induction principles.
3. Discuss superchargers
4. Discuss turbochargers and turbocharger failures.
5. Explain boost control. Describe the purpose of a nitrous oxide system.

RESOURCES: (All resources may be found at http://www.jameshalderman.com) Internet access required to hyperlink.

1. **Task Sheet ASE (A8-D-13) P-2**: Test Operation of Turbocharger/Supercharger
2. Chapter PowerPoint
3. Chapter Crossword Puzzle and Word Search
4. Videos: (A1) Engine Repair Videos
5. Videos: (A8) Engine Performance Videos
6. Animations: (A1) Engine Repair Animations
7. Animations: (A8) Engine Performance Animations

ACTIVITIES:

1. **Task Sheet ASE (A1 through A8-A-2) P-1:** Have students complete Test Operation of Turbocharger/Supercharger Task Sheet.

ASSIGNMENTS:

1. Chapter crossword and word search puzzles.
2. Complete end of chapter 10 question quiz.

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.

NOTES AND EVALUATION:
