# Automotive Technology 7<sup>th</sup> Edition Chapter 127 – Vibration and Noise Diagnosis and Correction Lesson Plan

### CHAPTER SUMMARY:

1. Vibration and Noise, Test Drive, Vibration Speed Ranges, Vibration Frequency, and Driveline Diagnosis 2. Noise



### **OBJECTIVES**:

- 1. Discuss vibration and noise concerns in vehicles.
- 2. List the procedures for a test-drive when diagnosing vibration/noise problems.
- 3. Explain the vibration speed ranges.
- 4. Explain how to determine the frequency of a vibration.
- 5. Explain ways to diagnose drive-line vibrations and noise.
- 6. Discuss how to find and correct noises.



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

- 1. Task Sheet: Noise and Vibration Diagnosis
- 2. Task Sheet: Universal Joint Noise and Vibration Diagnosis
- 3. Task Sheet: Driveshaft Phasing and Balance
- 4. Crossword Puzzle and Word Search
- 5. Chapter PowerPoint
- 6. Videos: (A3) Manual Drive Train Axles Videos
- 7. Animations: (A3) Manual Drive Train Axles Animations

# DEMO

# ACTIVITIES:

- 1. Task Sheet: Noise and Vibration Diagnosis
- 2. Task Sheet: Universal Joint Noise and Vibration Diagnosis
- 3. Task Sheet: Driveshaft Phasing and Balance
- 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 <u>Frequently Asked Questions</u> and <u>Tech Tips</u> sections.
- 2. Review and group discussion of the five (5) chapter <u>Review Questions</u>.



#### NOTES AND EVALUATION:

