# Automotive Technology 7<sup>th</sup> Edition Chapter 129 – Continuously Variable and Dual-Clutch Automatic Transmissions Lesson Plan

### **CHAPTER SUMMARY:**



- 1. Continuously Variable Transmission (CVT), Construction, and CVT Electronic Controls
- 2. CVT Operation, Pressure Testing a CVT, CVT Fluid, and CVT-Related Diagnostic Trouble Codes
- 3. Dual-Clutch Automatic Transmissions, Dual Clutch Transaxle, and Diagnosis and Service

### **OBJECTIVES:**



- 1. Describe the function, advantages, and disadvantages of a continuously variable transmission.
- 2. Describe the construction of a continuously variable transmission.
- 3. Discuss the electronic controls of a CVT.
- 4. Discuss the operation of a CVT.
- 5. Explain CVT pressure testing.
- 6. Discuss CVT fluid.
- 7. Discuss CVT-related DTCs.
- 8. Discuss the parts and operation of a dual-clutch automatic transmission.
- 9. Discuss the dual-clutch transaxle.
- 10. Describe the diagnostic and service procedures for a dual clutch transmission/transaxle system.



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

- 1. Task Sheet: Continuously Variable Transmission
- 2. Crossword Puzzle and Word Search
- 3. Chapter PowerPoint
- 4. Videos: (A2) Automatic Transmissions and Transaxles Videos
- 5. Animations: (A2) Automatic Transmissions and Transaxles Animations

# DEMO

### **ACTIVITIES:**

- 1. Task Sheet: Continuously Variable Transmission
- 2. 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. Review and group discussion of the five (5) chapter Review Questions.



### **NOTES AND EVALUATION:**

