# Automotive Technology 6<sup>th</sup> Edition Chapter 62 – Audio System Operation and Diagnosis Lesson Plan



#### **CHAPTER SUMMARY:**

- 1. Audio fundamentals, radios and receivers, and antennas
- 2. Antenna diagnosis, speakers, speaker types, and sound levels
- 3. Crossovers, aftermarket sound system upgrades, voice recognition and Bluetooth
- 4. Satellite radio and radio interference



#### **OBJECTIVES:**

- 1. Describe how AM, FM, and satellite radio work.
- 2. Describe radios, receivers, antennas, and antenna diagnosis.
- 3. Discuss the purpose, function, and types of speakers, and explain the decibel scale.
- 4. Discuss crossovers, after-market sound system upgrades, and voice recognition systems.
- 5. Explain how Bluetooth and satellite radio systems work.
- 6. List causes and corrections of radio noise and interference.
- 7. This chapter will help prepare for the ASE Electrical/Electronic Systems (A6) certification test content area "F" (Body Electrical Systems Diagnosis and Repair).



**RESOURCES**: (All resources may be found at <a href="http://www.jameshalderman.com">http://www.jameshalderman.com</a>) Internet access required to hyperlink.

- 1. Task Sheet ASE (A6-G-3) P-3: Radio Diagnosis
- 2. Chapter PowerPoint
- 3. Chapter Crossword Puzzle and Word Search
- 4. Videos: (A6) Electrical/Electronic Systems Videos
- 5. Animations: (A6) Electrical/Electronic Systems Animations



## **ACTIVITIES**:

1. Task Sheet ASE (A6-G-3) P-3: Have students complete Radio Diagnosis Task Sheet.

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# **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.

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#### **NOTES AND EVALUATION:**

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