

# 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
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#### **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).
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**RESOURCES:** (All resources may be found at <http://www.jameshalderman.com>)



1. **Task Sheet ASE (A6-G-3) P-3:** Radio Diagnosis
  2. Chapter PowerPoint
  3. Chapter Crossword Puzzle and Word Search
  4. Animations: Check Antenna and Check Speaker
  5. Videos: RAP relay (time 9:03), Radio Removal (time 4:06), and Radio noise diagnosis (time 27:41)
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#### **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.
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#### **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:**

