**Automotive Electrical and Engine Performance - 9th edition**

**Ch22: Audio System Operation and Diagnosis**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Audio Fundamentals, Radios and Receivers, Antennas, Speakers, Speaker Types, and Sound Levels

2. Voice Recognition, Bluetooth, and Satellite Radio

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**OBJECTIVES:**

1. Discuss audio system fundamentals.

2. Describe radios and receivers.

3. Describe types of antennas and antenna testing.

4. Discuss the purpose and function of speakers.

5. Describe types of speakers.

6. Explain the decibel scale.

7. Discuss voice recognition systems.

8. Explain how Bluetooth systems work.

9. Explain how satellite radio systems work. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

1. Task Sheet: Radio Diagnosis

2. Crossword Puzzle and Word Search

3. Videos: (A6) Electrical/Electronic Systems Videos

4.. Animations: (A6) Electrical/Electronic Systems Animations

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**ACTIVITIES:**

1. Task Sheet: Radio Diagnosis

2. Crossword Puzzle and Word Search

3. Chapter PowerPoint

4. Crossword Puzzle and Word Search

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**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.

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**CLASS DISCUSSION:**

1. Review and group discussion chapter Frequently Asked Questions and Tech Tips sections.

2. Ten (10) question end of Chapter Quiz.

3. Five (5) end of chapter Review Question for class discussion.

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**NOTES AND EVALUATION:**

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