

Automotive Technology 7th Edition

Chapter 44 – Magnetism and Electromagnetism

Lesson Plan



CHAPTER SUMMARY:

1. Fundamentals of Magnetism, Electromagnetism, and Uses of Electromagnetism
2. Electromagnetic Induction, Ignition Coils, and Electromagnetic Interference



OBJECTIVES:

1. Define magnetism and explain the concepts of magnetic induction, permeability, and reluctance.
2. Explain how an electromagnet works.
3. Explain how electromagnetism is used in relays and solenoids.
4. Discuss electromagnetic induction.
5. Describe how an ignition coil works.
6. Describe ways to reduce electromagnetic interference.



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

1. Task Sheet: Inspect and Test the Relays
2. Chapter PowerPoint
3. Crossword Puzzle and Word Search
4. Videos: [\(A6\) Electrical/Electronic Systems Videos](#)
5. Animations: [\(A6\) Electrical/Electronic Systems Animations](#)



ACTIVITIES:

1. Task Sheet: Inspect and Test the Relays
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: