

Automotive Technology 7th Edition

Chapter 40 – Digital Storage Oscilloscopes

Lesson Plan



CHAPTER SUMMARY:

1. Types of Oscilloscopes, Scope Setup and Adjustments, AC Voltage, DC and AC Coupling, and Pulse Trains
2. Number of Channels, Triggers, Using a Scope, Graphing Multimeter, and Graphing Scan Tools



OBJECTIVES:

1. Compare the different types of oscilloscopes.
2. Explain scope setup and adjustments.
3. Define AC voltage.
4. Describe the use of DC or AC coupling when displaying waveforms on an oscilloscope.
5. Explain how to interpret pulse trains on a scope.
6. Explain how to interpret channels on a scope.
7. Explain how to interpret triggers on a scope.
8. Explain how to use a scope.
9. Discuss graphing multimeters and scan tools.



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

1. Task Sheet: Oscilloscope
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: Oscilloscope
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: