

# Electric & Hybrid Electric Vehicles 1st Edition

## Chapter 6 – Digital Storage Oscilloscope Testing

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Types of Oscilloscopes, Scope Setup and Adjustment, and DC and AC Coupling
  2. Pulse Trains, Number of Channels, Triggers, Using a Scope and Using DSO Accessories
  3. Waveform Analysis
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#### **OBJECTIVES:**

1. Explain the advantages of a digital storage oscilloscope.
  2. Describe the process for adjusting the oscilloscope time base and voltage scale.
  3. Explain the difference between AC and DC coupling.
  4. Describe the different pulse train measurement scales.
  5. Explain the purpose of a trigger.
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#### **RESOURCES:** ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Oscilloscope Testing
  2. Task Sheet: Oscilloscope Setup and Adjustment
  3. Chapter PowerPoint
  4. [Crossword Puzzle and Word Search \(A6\)](#)
  5. [Videos: \(A6\) Electrical/Electronic Systems](#)
  6. [Animations: \(A6\) Electrical/Electronic Systems](#)
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#### **ACTIVITIES:**

1. Task Sheet: Oscilloscope Testing
  2. Task Sheet: Oscilloscope Setup and Adjustment
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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. Review and group discussion of the five (5) chapter [Review Questions](#).
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#### **NOTES AND EVALUATION:**

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