

# Automotive Technology 6<sup>th</sup> Edition

## Chapter 57 – Driver Information and Navigation Systems

### Lesson Plan

#### **CHAPTER SUMMARY:**



1. Dash warning symbols, steering wheel controls, voice activation, and maintenance indicators
  2. Analog and digital displays, heads-up display, night vision, and electronic displays
  3. Virtual display, touch screens, speedometers/odometers, and dash gauges
  4. Navigation and GPS, telematics, and backup cameras
  5. Parking-assist systems and lane departure warning
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#### **OBJECTIVES:**



1. Identify the meaning of dash warning symbols.
  2. Describe steering wheel controls, voice activation, and maintenance indicators.
  3. Discuss the operation of head-up display, night vision, and digital electronic displays.
  4. Describe how speedometers and odometers work.
  5. Discuss the diagnosis of oil pressure lamp, temperature lamp, brake warning lamp, and other analog dash instruments.
  6. Describe how a navigation system works.
  7. Explain the operation and diagnosis of telematics systems, backup camera, backup sensor, and lane departure warning system.
  8. Help prepare for the ASE Electrical/Electronic Systems (A6) certification test content area “F” (gauges, Warning Devices, and Driver information System Diagnosis and repair).
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**RESOURCES:** (All resources may be found at <http://www.jameshalderman.com>) Internet access required to hyperlink.



1. **Task Sheet ASE (A6-F-1) P-2:** Gauge Diagnosis
  2. **Task Sheet ASE (A6-F-2) P-2:** Driver Information and Warning Devices
  3. Chapter PowerPoint
  4. Chapter Crossword Puzzle and Word Search
  5. Videos: [\(A6\) Electrical/Electronic Systems Videos](#)
  6. Animations: [\(A6\) Electrical/Electronic Systems Animations](#)
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#### **ACTIVITIES:**



1. **Task Sheet ASE (A6-F-1) P-2:** Have students complete Gauge Diagnosis Task Sheet.
  2. **Task Sheet ASE (A6-F-2) P-2:** Have students complete Driver Information and Warning Devices 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:**



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