

Automotive Technology 7th Edition

Chapter 58 – Advanced Driver Assist Systems (ADAS)

Lesson Plan



CHAPTER SUMMARY:

1. Advanced Driver Assist Systems, Blind Spot Monitor, Parking-Assist Systems, and Lane Departure Warning
2. Lane Keep Assist, Adaptive Cruise Control, and Rear Cross-Traffic Warning (RCTW)
3. Automatic Emergency Braking, Pre-Collision System, Hill Start Assist, and ADAS Diagnosis
4. Camera and Radar Sensor Calibration



OBJECTIVES:

1. Describe the purpose and function of advanced driver assist systems.
2. Discuss blind spot monitors.
3. Discuss parking assist as well as self-parking systems.
4. Explain lane departure warning systems.
5. Explain lane keep assist systems.
6. Describe how adaptive cruise control systems work.
7. Discuss rear cross-traffic warning system operation.
8. Explain automatic emergency braking.
9. Explain pre-collision systems.
10. Describe the operation of hill start assist.
11. Describe the diagnostic procedures for advanced driver assist systems.
12. Describe camera and radar sensor calibration.



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

1. Task Sheet: Advanced Driver Assist Systems
2. Task Sheet: ADAS Calibration
3. Chapter PowerPoint
4. Crossword Puzzle and Word Search
5. Videos: [\(A6\) Electrical/Electronic Systems Videos](#)
6. Animations: [\(A6\) Electrical/Electronic Systems Animations](#)



ACTIVITIES:

1. Task Sheet: Advanced Driver Assist Systems
2. Task Sheet: ADAS Calibration
3. 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](#).

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NOTES AND EVALUATION:


