**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

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**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](https://jameshalderman.com/a6_vid_lib_page/)

6. Animations: [(A6) Electrical/Electronic Systems Animations](https://jameshalderman.com/a6_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Advanced Driver Assist Systems

2. Task Sheet: ADAS Calibration

3. Crossword Puzzle and Word Search

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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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