Automotive Electrical and Engine Performance 9th Edition
Chapter 23 - Advanced Driver Assist Systems (ADAS)

www.CrosswordWeaver.com
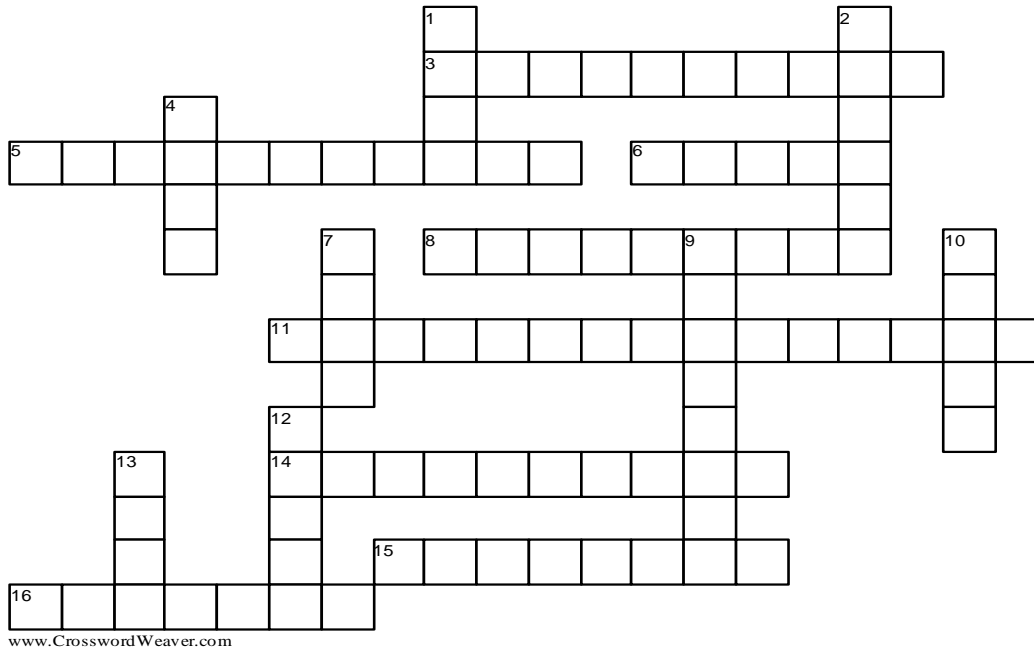
ACROSS

3 _____ Intelligence (AI): The use of machine learning and algorithms to improve decision-making processes, particularly in autonomous vehicles and driver assist systems.

5 _____ Speed Advice (ISA): A system that provides speed limit recommendations or warnings based on road conditions and speed limits.

6 _____ Detection and Ranging (LiDAR): A system that uses laser light pulses to create a 3D image of the surroundings, measuring distance, location, and speed of objects.

8 _____ Emergency Braking (AEB): A safety system that automatically applies the brakes to prevent or mitigate collisions if the driver fails to act.

11 _____ Parking Sensors (EPS): Sensors that use electromagnetic fields to detect nearby objects, assisting with parking.

14 _____ Object Sensors: Sensors that use ultrasonic waves to detect objects nearby, commonly used in parking-assist systems.

15 _____ Driver Assist Systems (ADASs): A collection of safety systems designed to enhance driving by assisting with functions such as braking, steering, and speed control.

16 _____-Assist System: A system that helps the driver park by providing warnings of obstacles or even automating the parking process.

DOWN

1 _____ Departure Warning System (LDWS): A system that alerts the driver when the vehicle begins to unintentionally drift out of its lane.

2 _____ Actuator: A component that provides tactile feedback, often through vibrations, to alert drivers of certain events or warnings.

4 Lane _____ Assist (LKA): A system that helps keep the vehicle centered within its lane by providing steering assistance.

7 _____-Parking: An automated parking system that uses cameras and electric power steering to guide the vehicle into a parking space.

9 _____ Cruise Control (ACC): Also known as radar or dynamic cruise control, this system adjusts the vehicle's speed to maintain a safe following distance from the vehicle ahead.

10 _____ Spot Monitor (BSM): A system that detects vehicles in the driver's blind spots and provides warnings to prevent unsafe lane changes.

12 _____–Machine Interface (HMI): The interface that allows communication between the driver and the vehicle, including displays, controls, and voice recognition.

13 _____ Cross-Traffic Warning (RCTW): A system that alerts the driver to vehicles approaching from the sides while reversing out of a parking space.