



Advanced Driver Assistance Vehicle Technologies and System Definitions

- **Passive Systems:** warn the driver, but do not control the vehicle
- **Active Systems:** warn the driver and take limited control of the vehicle
- **Cameras:** auxiliary vision for the driver

For additional information and resources on ADAS Technologies and how they impact the performance of the aftermarket please visit: <https://www.semagarage.com/services/vehicleadas>

PASSIVE ADAS SYSTEMS

Forward-Collision Warning

Acronyms: FCW, CW (Collision Warning), PFCW (Passive Forward-Collision Warning)

System warns driver that a collision is imminent, through a sound or visual indicator. (Brakes are not automatically applied).

Blind-Spot Warning

Acronyms: BSW, BSD (Blind Spot Detection)

System warns driver when objects are detected in the rear-sides of the vehicle, where visibility is limited, through a visual indicator.

Lane Departure Warning

Acronyms: LDW

System warns driver when vehicle starts to leave the lane without a turn signal, through a sound or visual indicator.

Rear Cross Traffic

Acronyms: RCTA

System warns driver when oncoming objects are detected in the left or right rear of the vehicle, while reversing, through a sound or visual indicator.

Passive Park Assist

Acronym: PPA, PA (Park Assist)

Monitors the vehicle parking distance, warns driver if vehicle is approaching objects too closely, through a sound or visual indicator.

Front Cross Traffic

System warns driver when oncoming objects are detected in the left or right front of the vehicle, while pulling forward, through a sound or visual indicator.

ACTIVE ADAS SYSTEMS

Advanced Cruise Control

Acronym: ACC

System tracks vehicles ahead and automatically adjusts the speed accordingly, while Cruise Control is engaged. System will disengage if driver intervenes. *(Some systems do not bring the vehicle to a complete stop).*

Automatic Emergency Braking

Acronym: AEB, CB (Collision Braking), PAEB (Pedestrian Automatic Emergency Braking), CIB (Crash Imminent Braking), DBS (Dynamic Brake Support).

System detects an imminent forward crash with another vehicle or pedestrian, followed by a warning to take corrective action. If driver does not respond, the brakes will be automatically applied. System is also capable of supplementing the driver's braking effort/force if brakes are not applied strongly.

Active Park Assist

System identifies a parking space and automatically parks the vehicle for the driver.

Lane Keep Assist

Acronym: LKA, LKS (Lane Keep System)

System tracks lane markings and will automatically steer back into the lane, if the vehicle steers away without a turn signal.

Adaptive Lighting

Headlight capability to automatically dim, self-level, and/or rotate to illuminate around corners, depending on road conditions.

CAMERA VISION SYSTEMS

360-degree Camera View

Displays a bird's eye view of the area around the entire vehicle, using multiple cameras, through a dash screen.

Rear View Camera

Acronyms: RVS (Rearview Video System)

Displays the area behind the vehicle, while the vehicle is in reverse, through a dash screen or rear-view mirror.

Night Vision

Displays the area in front of the vehicle using an infrared camera, through a dash screen

Side View Camera

Displays the side area of the car, where driver visibility is limited, through a dash screen.