

## **CLEARING THE CONFUSION:**

**Recommended Common Naming for** Advanced Driver Assistance Technologies



Advanced Driver Assistance Systems (ADAS) have become increasingly prevalent on new vehicles, but the terminology used by automakers to describe them varies widely and so far has focused on marketing strategies.

The common naming outlined is simple, specific and based on system functionality. The list is meant to aid in reducing driver confusion and define the functions of ADAS in a consistent manner. This is critical to ensure that drivers are aware these systems are designed to assist, not replace an engaged driver.

The list is not meant to replace automaker proprietary system or package names, but rather help identify key functions within those packages and provide clarity to consumers. The list will be continually refined as we work with other stakeholders and as new systems are developed.

# **COLLISION WARNING**

Blind Spot Warning	Detects vehicles in the blind spot while driving and notifies the driver to their presence. Some systems provide an additional warning if the driver activates the turn signal.
Forward Collision Warning	Detects a potential collision with a vehicle ahead and alerts the driver. Some systems also provide alerts for pedestrians or other objects.
Lane Departure Warning	Monitors vehicle's position within the driving lane and alerts driver as the vehicle approaches or crosses lane markers.
Parking Collision Warning	Detects objects close to the vehicle during parking maneuvers and notifies the driver.
Rear Cross Traffic Warning	Detects vehicles approaching from the side at the rear of the vehicle while in reverse gear and alerts the driver. Some systems also warn for pedestrians or other objects.

### **COLLISION INTERVENTION** Automatic Emergency Detects potential collisions with a vehicle ahead, provides forward collision warning, Braking and automatically brakes to avoid a collision or lessen the severity of impact. Some systems also detect pedestrians or other objects. Automatic Emergency Detects potential collisions with a vehicle ahead and automatically steers to avoid or lessen the severity of impact. Some systems also detect pedestrians or other objects. Steering **Reverse Automatic** Detects potential collisions while in reverse gear and automatically brakes to avoid or lessen the severity of impact. Some systems also detect pedestrians or other objects. Emergency Braking

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while others cannot.

### **DRIVING CONTROL ASSISTANCE** Cruise control that also assists with acceleration and/or braking to maintain a driverselected gap to the vehicle in front. Some systems can come to a stop and continue

Lane Keeping Assistance Provides steering support to assist the driver in preventing the vehicle from departing the lane. Some systems also assist to keep the vehicle centered within the lane.

Active Driving Assistance<sup>1</sup> Provides steering and brake/acceleration support to the driver at the same time. The driver must constantly supervise this support feature and maintain responsibility for driving.

PARKING ASSISTANCE								
Backup Camera	Displays the area behind the vehicle when in reverse gear.							
Surround View Camera	Displays the immediate surroundings of some or all sides of the vehicle while stopped or during low speed maneuvers.							
Active Parking Assistance	Assists with steering and potentially other functions during parking maneuvers. Driv may be required to accelerate, brake, and/or select gear position. Some systems are capable of parallel and/or perpendicular parking. The driver must constantly superv this support feature and maintain responsibility for parking.							
Remote Parking Assistance <sup>1</sup>	Without the driver being physically present inside the vehicle, provides steering, braking, accelerating and/or gear selection while moving a vehicle into or out of a parking space. The driver must constantly supervise this support feature and maintain responsibility for parking.							
Trailer Assistance	Assists the driver with visual guidance while backing towards a trailer or during backing maneuvers with a trailer attached. Some systems may provide additional images while driving or backing with a trailer. Some systems may provide steering assistance during backing maneuvers.							

### **OTHER DRIVER ASSISTANCE SYSTEMS**

Automatic High Beams	Switches between high and low beam headlamps automatically based on lighting and traffic.				
Driver Monitoring	Observes driver actions to estimate if they are not engaged in the task of driving. Some systems may monitor eye movement and/or head position.				
Head-Up Display	Projects information relevant to driving into the driver's forward line of sight.				
Night Vision	Improves forward visibility at night by projecting enhanced images on instrument cluster or head-up display.				

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Consumers do not understand the difference between systems that activate to keep the car from departing a lane and systems that continually keep the car centered in its lane.

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Cadillac's Super Cruise



Tesla's Autopilot



Nissan/Infiniti's ProPilot Assist



Volvo's Pilot Assist



System Name	Overall Automation System Rating	Capability & Performance	Ease of Use	Clear When Safe to Use	Keeping Driver Engaged	Unresponsive Driver	Vehicles Tested
Super Cruise	$\bigcirc$		$\bigcirc$	8	$\bigcirc$	$\bigcirc$	Cadillac CT6
Autopilot		$\bigcirc$		<b>&gt;</b>	8		Tesla X/S/3
ProPilot Assist	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	1	1	Infiniti QX50/ Nissan Leaf
Pilot Assist	8	8	8	<b>(</b>		8	Volvo XC40/ XC60

# New Report Coming Fall 2020



Partially Automated Driving Systems

INSIGHTS FROM CONSUMER REPORTS