

I-CAR: Collision Repair Diagnostics Definitions

Pre-Scan/Health Scan (Capturing Codes)

A step in the damage analysis/blueprinting process used to identify errors, faults, and/or damage related, and unrelated, to the collision. Pre-scanning is also done to capture diagnostic trouble codes (DTCs). A pre-scan is not possible if the 12-volt electrical system and vehicle communication networks are disabled or cannot be maintained throughout the scan. If a pre-scan is not possible because of vehicle damage, it should be done as soon as repair progress allows it to be done safely.

Post-Scan (Identifying/Clearing Codes)

A post-repair, quality control process used to ensure all vehicle system diagnostic trouble codes (DTCs), related and unrelated to the collision, and those set during the repair, have been identified and cleared. A test drive may be required prior to clearing some codes; some codes may only appear after certain driving distances, key cycles, or other enable criteria have been reached.

Post-Repair Calibration/Initialization (PRC/I)

A required step following the removal, installation, and/or repair of many safety and driver convenience system parts. PRC/I may also be required if there is damage/trauma to the mounting location(s), R&I or R&R of the cameras/sensors/mounting locations, R&I or R&R of parts in front of, or behind, cameras and/or sensors, or R&R or R&I of closure/trim panels.

Access to OEM information is mandatory to determine if post-repair calibration is required. A scan tool that has been confirmed by the tool's provider to have the required initialization/calibration capabilities for the vehicle and model year involved, special tools, and/or a test drive following vehicle maker established parameters may also be required.

Post-repair calibration/initialization may also be referred to as aiming, health check, module setup, relearn, zero-point calibration, initiation, or calibration.

Disclaimer: These basic definitions, developed and vetted by the collision repair inter-industry, and published by I-CAR, do not represent an all-inclusive list of collision repair diagnostic definitions or tasks. These definitions do not include diagnostic troubleshooting or repair, nor are they meant to represent when, or how, collision repair diagnostics should be performed. Always refer to OEM information for scanning, calibration, and tool and equipment requirements. These definitions are intended to differentiate tasks associated with collision repair diagnostics and serve as a foundation for industry professionals.

Vehicle System Definitions

360° Camera View

360° Camera View systems show a bird's eye view of the area around the entire vehicle, using multiple cameras.

Active Park Assist

Active Park Assist identifies a parking space and parallel parks the vehicle for the driver.

Adaptive Cruise Control

Adaptive Cruise Control, when activated, detects vehicles in the lane ahead and will lower the set speed to match the speed of the vehicle ahead. Once there are no vehicles in the lane ahead, the cruise control will resume the set speed. *(note: not all vehicles have the ability to stop the vehicle completely)*

Collision Warning

Collision Warning sounds an audible alarm and/or a visual indicator to alert the driver that a collision is eminent. *(note: no brakes will be applied without the driver applying the brake)*

Collision Braking

Collision Braking will detect an object ahead and will automatically apply the brakes without driver input.

Blind Spot Detection

Blind Spot Detection will detect objects on the sides of the vehicle and will display a visual indicator that there is an object to the side of the vehicle.

Side View

Side View has a screen that will display the area to the side of the vehicle.

Lane Departure Warning

Lane Departure Warning allows the vehicle to watch the lane markings on the road and, if the vehicle starts to leave the lane without a turn signal, sound an audible alarm and/or a visual indicator to alert the driver that the vehicle is moving out of the lane.

Lane Keep Assist

Lane Keep Assist allows the vehicle to watch the lane markings on the road and, if the vehicle starts to leave the lane without a turn signal, bring the vehicle back into the lane without the drivers input.

Rear View

Rear View has a screen on the dash or rear-view mirror that will display the area behind the vehicle when the vehicle is in reverse.

Vehicle System Definitions (cont'd)

Park Assist

Park Assist monitors the distance between the vehicle and other objects in the front and rear and will sound an audible alarm and/or a visual indicator to alert the driver that the vehicle is approaching an object.

Front Cross Traffic

Front Cross Traffic allows the vehicle to detect oncoming traffic from the left or right front of the vehicle when pulling forward out of a parking stall.

Rear Cross Traffic

Rear Cross Traffic allows the vehicle to detect oncoming traffic from the left or right rear of the vehicle when pulling rearward out of a parking stall.

Adaptive Lighting

Adaptive Lighting can have several functions depending on the vehicle features. The lights can turn to illuminate around corners when the steering wheel turns, they may self-level, and/or automatically dim the high-beams for oncoming traffic.

Night Vision

Night Vision has a screen that will display the area in front of the vehicle using an infrared camera.