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Before Using Driver Assistance System

WARNING

Always maintain a safe distance from the vehicles ahead and adjust your vehicle speed to the road conditions. Driver Assistance system may not operate in all situations and cannot avoid all collisions.

To prevent serious injury or death:

- Control your vehicle at all times. In some cases, the Driver Assistance system may provide unanticipated braking or steering.
- Never attempt to activate any Driver Assistance system by intentionally driving toward people, animals, objects, or other vehicles.
- The steering, braking, and acceleration inputs from you may override the responses from driver assistance system.
- Do not use Driver Assistance system when towing a trailer or using a hitch mounted carrier.
- Do not use Driver Assistance system if you believe the sensors or the systems may not be functioning properly.

Limitations of Driver Assistance System

Nearby vehicles, road conditions, or other factors may delay the response from Driver Assistance system or cause these systems not to function, including:

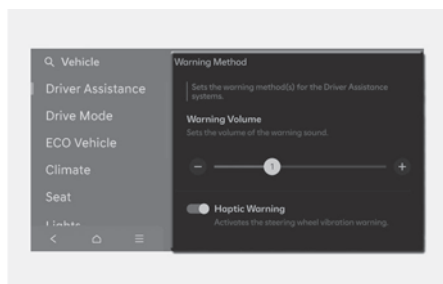
- Lane-restricted driving situations (tollbooths, construction zones, etc.)
- Curves, hills, or other road features that may detect vehicles in adjacent lanes or not detect vehicles ahead in the roadway
- If other vehicles, pedestrians, or cyclists are not detected
- Driving in inclement weather, such as heavy rain, snow or icy conditions
- Interference from strong electromagnetic waves
- Streets with railroad tracks or other embedded metal objects
- If anything is blocking or covering a sensor
- If any camera, radar, or sensor is damaged

Information

Due to the infotainment software version, the description of each function of the driver assistance system may differ from the owner's manual.

Driver assistance system settings

Warning Methods



The Warning Methods can be set with the engine on. Select **Setup > Vehicle > Driver Assistance > Warning Method** from the infotainment system to change the following settings:

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Haptic Warning:** Activate the steering wheel vibration warning.
- **Lane Safety Audible Warning Off:** Turns off the Lane Safety Audible Warning, when both warning volume and haptic warning are on.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.
- **Parking Safety Priority:** Lowers all other audio volumes when the Parking Assist view is active.

CAUTION

For safety, the warning method is different depending on each function of the driver assistance system.

Please check how each function warns you.

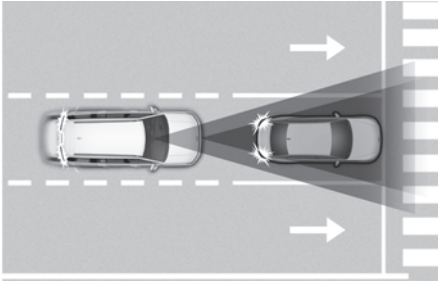
Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.
- If you turn off the **Warning Volume**, for your safety, the function may warn you with a low volume, except **Lane Keeping Assist, Blind-Spot Collision-Avoidance Assist and Rear Cross-Traffic Collision-Avoidance Assist**.
- The **Warning Volume** and **Haptic Warning** cannot be turned off at the same time. When one of the warning is turned off the other is activated.
- The **Lane Safety Audible Warning Off** can be set when both the Warning Volume and the Haptic Warning are on.

Forward Collision-Avoidance Assist (FCA)

 If equipped

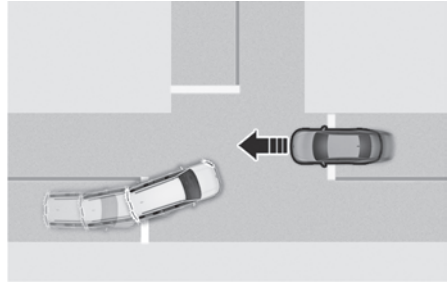
Basic function



Forward Collision-Avoidance Assist uses the front view camera and front radar to help detect a vehicle, a pedestrian, or a cyclist ahead on the road. The function may warn you with a warning message on the instrument cluster and an audible warning if a collision is imminent. If necessary, it may assist with braking your vehicle to help reduce collision speed and avoid a collision.

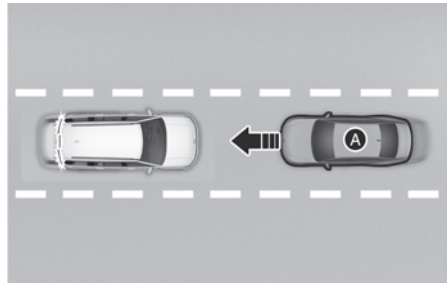
In addition, when driving at high speeds, Forward Collision-Avoidance Assist will help detect vehicles in front and adjacent lanes. If a collision is imminent when changing lanes, Forward Collision-Avoidance Assist will apply emergency braking to help reduce collision speed or help avoid a collision. (if equipped)

Junction Turning function



Junction Turning function can help avoid a collision with an oncoming vehicle or powered two-wheeler in an adjacent lane when turning left at a crossroad with the turn signal on by applying emergency braking.

Direct Oncoming function

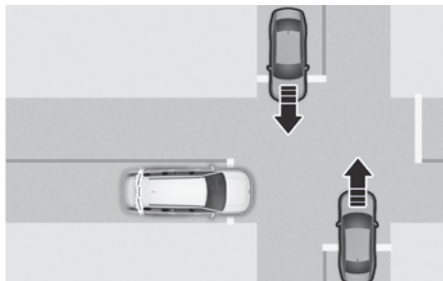


[A] Oncoming vehicle

Direct Oncoming function helps reduce the speed at the collision when a vehicle or powered two-wheeler approaching from the opposite side is detected.

Junction Crossing function

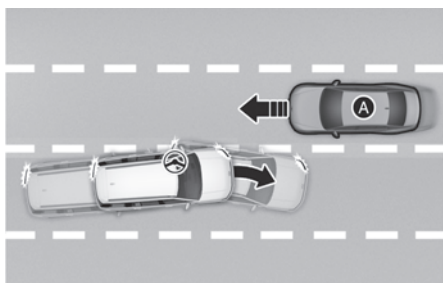
 if equipped



Junction Crossing function can help avoid a collision with oncoming vehicles on the left or right side when crossing an intersection by applying emergency braking.

Lane-Change Oncoming function

 if equipped

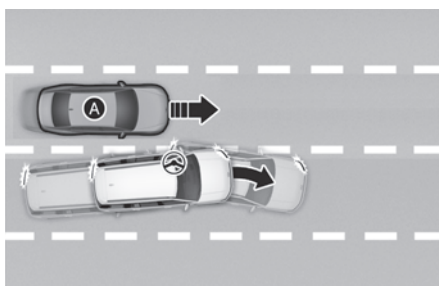
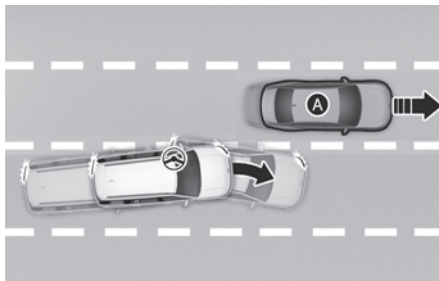


[A] Oncoming vehicle

Lane-Change Oncoming function helps avoid a collision with an oncoming vehicle or powered two-wheeler when changing lanes by assisting the driver's steering.

Lane-Change Side function

 if equipped

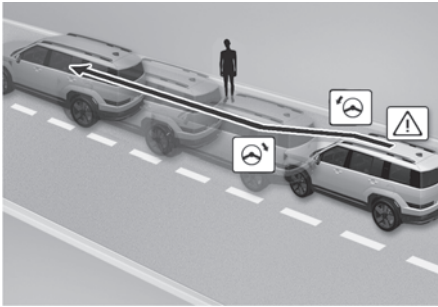


[A] Front-side vehicle

Lane-Change Side function helps avoid a collision with the vehicle or powered two-wheeler ahead in the next lane when changing lanes by assisting the driver's steering.

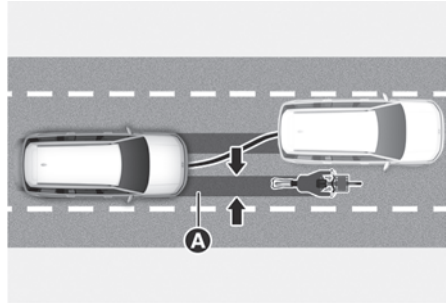
Evasive Steering Assist function

 if equipped



- Driver steering assist
Evasive Steering Assist function helps avoid a collision with a vehicle, powered two-wheeler, pedestrian or cyclist ahead in the same lane. When a risk of collision is detected, Evasive Steering Assist function will warn the driver and if the driver steers to avoid collision it will assist the driver's steering.
- Evasive steering assist
Evasive Steering Assist function helps avoid a collision with a powered two-wheeler, pedestrian or cyclist ahead in the same lane. When a risk of collision is detected, Evasive Steering Assist function will warn the driver and if there is space to avoid collision in the lane, it will assist the driver's steering.

Evasive Steering Assist function operates when there is a collision risk and sufficient operating area between your vehicle and the detected pedestrian or cyclist ahead.



[A] Operating Area of Evasive Steering Assist function

Information

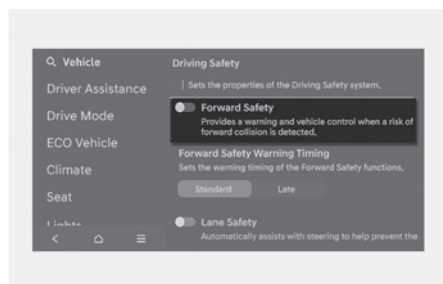
Forward Collision-Avoidance Assist uses the following sensors:

- Front view camera
- Front radar
- Front corner radar (if equipped)
- Rear corner radar

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Forward Collision-Avoidance Assist settings

Forward Safety



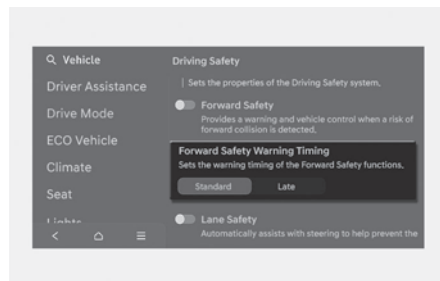
With the engine on, select **Setup > Vehicle > Driver Assistance > Driving Safety** in the infotainment system to set whether to use each function.

- If "**Forward Safety**" is selected, Forward Collision-Avoidance Assist will warn the driver with a warning message, an audible warning depending on the collision risk levels. Braking assist will be applied depending on the collision risk levels. If "**Forward Safety**" is deselected, Forward Safety will turn off. The warning light (⚠) will illuminate on the cluster.

⚠ CAUTION

- The settings for Forward Safety include 'Basic function', 'Junction Turning', and 'Direct Oncoming'.

Forward Safety Warning Timing



With the Engine Start/Stop button ON, select **Setup > Vehicle > Driver Assistance > Driving Safety > Forward Safety Warning Timing** from the Settings menu to change the initial warning activation time. Warning Timing is set to **Standard** at the factory.

⚠ WARNING

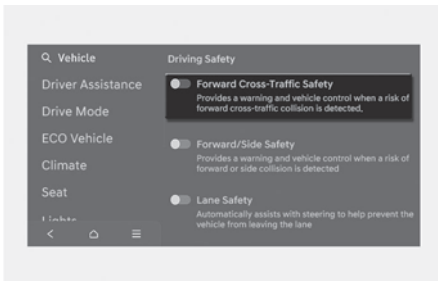
- Even though **Standard** is selected for Warning Timing if the vehicle ahead of you suddenly stops, the initial warning activation time may not seem late.
- Select **Late** for Warning Timing when traffic is light and your vehicle speed is slow.

i Information

When the engine is restarted, the Warning Timing maintains its last setting.

Forward Cross-Traffic Safety

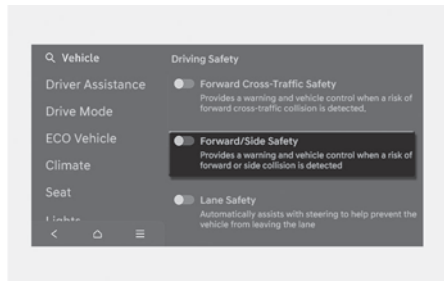
 if equipped



With the engine on, select **Setup > Vehicle > Driver Assistance > Forward Cross-Traffic Safety** in the infotainment system to turn on Junction Crossing function and deselect to turn off the function.

Forward/Side Safety

 if equipped



With the engine on, select **Setup > Vehicle > Driver Assistance > Forward/Side Safety** in the infotainment system to set whether to use each function.

- If "**Forward/Side Safety**" is selected, Forward Collision-Avoidance Assist will warn the driver with a warning message, an audible warning depending on the collision risk levels. Steering assist will be applied depending on the collision risk levels. If "**Forward/Side Safety**" is deselected, Forward Safety will turn off. The warning light (⚠) will illuminate on the cluster.

The driver can monitor Forward Collision-Avoidance Assist On/Off status in the infotainment system. If the warning light ⚠ or ⚠ remains ON when Forward Collision-Avoidance Assist is on, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

When the vehicle is restarted, Forward Safety, Forward Cross-Traffic Safety, and Forward/Side Safety will always turn on. Although you can turn off these functions again, please keep in mind you cannot be assisted with the functions when you turned them off. The driver should always be aware of the surroundings and drive safely.

⚠ CAUTION

- The setting for **Forward Safety** include 'Basic function', 'Junction Turning function', and 'Direct Oncoming function'.
- The setting for **Forward-Cross Traffic Safety** includes 'Junction Crossing function'.
- The setting for **Forward/Side Safety** includes 'Lane-Change Oncoming function', 'Lane-Change Side function', and 'Evasive Steering Assist function' (if equipped).
- If **Forward Safety** is deselected, Junction Crossing function does not operate even when **Forward-Cross Traffic Safety** and **Forward/Side Safety** are selected (if equipped).

⚠ CAUTION

When the trailer's connector is plugged into your vehicle, Forward/Side Safety function of Forward Collision-Avoidance Assist automatically turns off. In this case, you cannot get help from Forward/Side Safety function of Forward Collision-Avoidance Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

i Information

You can set the following Warning Methods:

- Warning Volume/Haptic Warning/Driving Safety Priority

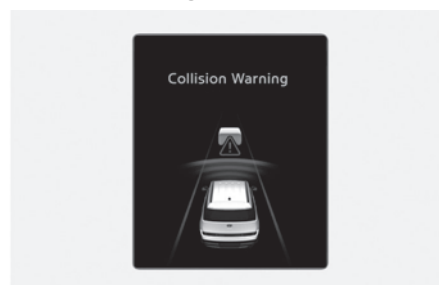
For more information, refer to the "Driver assistance system settings" section in this chapter.

Forward Collision-Avoidance Assist Operation

Basic function

The basic function for Forward Collision-Avoidance Assist is to warn and help control the vehicle depending on the collision risk level: 'Collision Warning', 'Emergency Braking' and 'Stopping vehicle and ending brake control'.

Collision Warning



- To warn the driver of a collision, Forward Safety warning light (⚠) blinking, the "Collision Warning" warning message will appear on the cluster, an audible warning will sound, and the steering wheel will vibrate.
- If a vehicle or powered two-wheeler is detected in front, the function will operate when your vehicle speed is between about 10-200 km/h (6-124 mph).
- If a pedestrian or cyclist is detected in front, the function will operate when your vehicle speed is between about 10-85 km/h (6-53 mph).

Emergency Braking



To warn the driver that emergency braking will be assisted, Forward Safety warning light (🚨) blinking, the "Emergency Braking" warning message will appear on the cluster, an audible warning will sound, and the steering wheel will vibrate.

Emergency Braking will operate under the following conditions:

- Vehicle or powered two-wheeler:

	Driving Vehicle	Stopped Vehicle
Weak braking power	About 10-200 km/h (6-124 mph)	
Strong braking power	About 10-130 km/h (6-80 mph)	About 10-75 km/h (6-47 mph) About 10-100 km/h (6-62 mph)*1

*1 If Forward Collision-Avoidance Assist judges that avoiding a collision is difficult even by changing the driving lane, braking is assisted more earlier. (if equipped)

- Pedestrian or cyclist:
The function will operate when your vehicle speed is between about 10-65 km/h (6-40 mph).

CAUTION

The function operation range may decrease due to the front traffic condition or the surroundings of the vehicle.
When driving at night, the powered two-wheeler recognition performance is degraded, so Forward Collision-Avoidance Assist may be temporarily limited or may not work.

Stopping vehicle and ending brake control



- When the vehicle is stopped due to emergency braking, the "Drive carefully" warning message will appear on the instrument cluster.
For your safety, the driver should depress the brake pedal immediately and check the surroundings.
- Brake control will end after the vehicle is stopped by emergency braking for about 2 seconds.

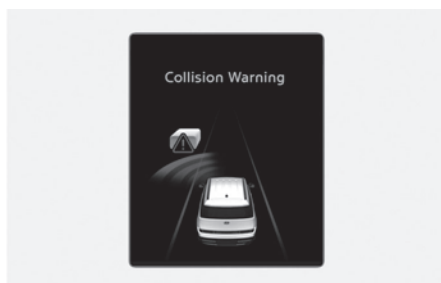
Information

Press the hazard warning flasher to turn off the audible warning of the collision warning or emergency braking system.

Junction Turning function

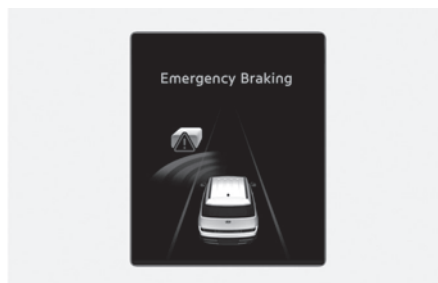
Junction Turning function will warn and help control the vehicle depending on the collision risk level: 'Collision Warning', 'Emergency Braking' and 'Stopping vehicle and ending brake control'

Collision Warning



- To warn the driver of a collision, Forward Safety warning light (🚦) blinking, the "**Collision Warning**" warning message will appear on the cluster, an audible warning will sound, and the steering wheel will vibrate.
- The function will operate when your vehicle speed is between about 10-30 km/h (6-19 mph) and the oncoming vehicle or powered two-wheeler speed is between about 30-70 km/h (19-44 mph).

Emergency Braking



- To warn the driver that emergency braking will be assisted, Forward Safety warning light (🚦) blinking, the "**Emergency Braking**" warning message will appear on the cluster, an audible warning will sound, and the steering wheel will vibrate.
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the oncoming vehicle.
- The function will operate when your vehicle speed is between about 10-30 km/h (6-19 mph) and the oncoming vehicle or powered two-wheeler speed is between about 30-70 km/h (19-44 mph).

Stopping vehicle and ending brake control



- When the vehicle is stopped due to emergency braking, the "**Drive carefully**" warning message will appear on the cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for about 2 seconds.

i Information

Press the hazard warning flasher to turn off the audible warning of the collision warning or emergency braking system.

Direct Oncoming function

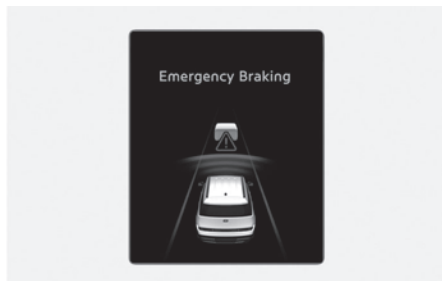
Direct Oncoming function will warn and control the vehicle depending on the collision risk level: 'Collision Warning', 'Emergency Braking' and 'Stopping vehicle and ending brake control'.

Collision Warning



- To warn the driver of a collision, Forward Safety warning light (🚦) blinking, the "**Collision Warning**" warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- The function will operate when:
 - Your vehicle speed is between about 30-130 km/h (19-80 mph) or 10-130 km/h (6-80 mph) (if equipped)
 - Oncoming vehicle or powered two-wheeler speed is about above 10 km/h (6 mph)

Emergency Braking



- To warn the driver that emergency braking will be assisted, Forward Safety warning light (警告灯) blinking, the **"Emergency Braking"** warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the oncoming vehicle.
- The function will operate when your vehicle speed is between about 30-130 km/h (19-80 mph) and the detected oncoming vehicle or powered two-wheeler speed is about above 10 km/h (6 mph).

Stopping vehicle and ending brake control



- When the vehicle is stopped due to emergency braking, the **"Drive carefully"** warning message will appear on the instrument cluster. For your safety, the driver should depress the brake pedal immediately and check the surroundings.
- Brake control will end after the vehicle is stopped by emergency braking for about 2 seconds.

CAUTION

If your vehicle or the oncoming vehicle or powered two-wheeler is not driving straight, Direct Oncoming function warning and control may be late or may not operate.

When driving at night, the powered two-wheeler recognition performance is degraded, so Forward Collision-Avoidance Assist may be temporarily limited or may not work.

Information

Press the hazard warning flasher to turn off the audible warning of the collision warning or emergency braking system.

Junction Crossing function

 if equipped

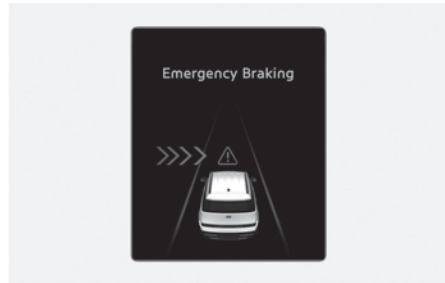
Junction Crossing function will warn and control the vehicle depending on collision risk level: 'Collision Warning', 'Emergency Braking' and 'Stopping vehicle and ending brake control'.

Collision Warning



- To warn the driver of a collision, Forward Safety warning light (🚦) blinking, the **"Collision Warning"** warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- The function will operate when your vehicle speed is between about 10-55 km/h (6-34 mph) and the crossing vehicle speed is between about 10-60 km/h (6-37 mph).

Emergency Braking



- To warn the driver that emergency braking will be assisted, Forward Safety warning light (🚦) blinking, the **"Emergency Braking"** warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the crossing vehicle.
- The function will operate when your vehicle speed is between about 10-55 km/h (6-34 mph) and the crossing vehicle speed is between about 10-40 km/h (6-25 mph).

Stopping vehicle and ending brake control



- When the vehicle is stopped due to emergency braking, the "**Drive carefully**" warning message will appear on the instrument cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- Brake control will end after the vehicle is stopped by emergency braking for about 2 seconds.

CAUTION

If the collision angle with the crossing vehicle is beyond a certain range, Junction Crossing function warning and control may be late or may not operate.

Information

Press the hazard warning flasher to turn off the audible warning of the collision warning or emergency braking system.

Lane-Change Oncoming function

 if equipped

Lane-Change Oncoming function will warn and control the vehicle depending on collision risk level: 'Collision Warning' and 'Emergency Steering'.

Collision Warning



- To warn the driver of a collision, Emergency Steering warning light () blinking, the "**Collision Warning**" warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- The function will operate when your vehicle speed is between about 40-145 km/h (25-90 mph) and the oncoming vehicle or powered two-wheeler speed is about above 10 km/h (6 mph) and the relative speed with your vehicle is about below 200 km/h (124 mph).

Emergency Steering



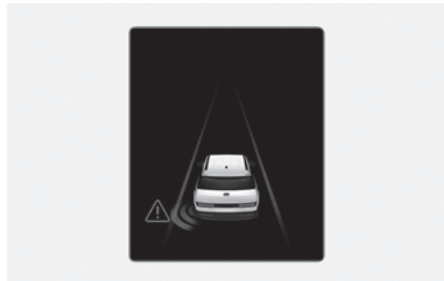
- To warn the driver that emergency steering will be assisted, Emergency Steering warning light (🚨) blinking, the "**Emergency Steering**" warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- In emergency steering situation, steering is assisted by the function to help prevent collision with the oncoming vehicle.
- The function will operate when your vehicle speed is between about 40-145 km/h (25-90 mph) and the oncoming vehicle or powered two-wheeler speed is about above 10 km/h (6 mph) and the relative speed with your vehicle is about below 200 km/h (124 mph).

Lane-Change Side function

if equipped

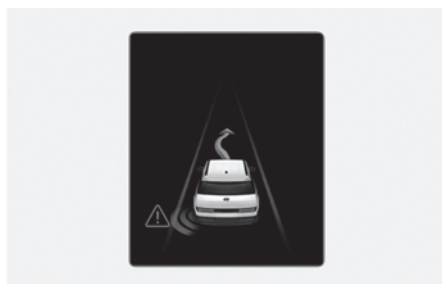
Lane-Change Side function will warn and control the vehicle depending on collision risk level: 'Collision Warning' and 'Emergency Steering'

Collision Warning



- To warn the driver of a collision, Emergency Steering warning light (🚨) blinking, the "**Collision Warning**" warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- The function will operate when your vehicle speed is between about 40-145 km/h (25-90 mph).

Emergency Steering



- To warn the driver that emergency steering will be assisted, Emergency Steering warning light (🚨) blinking, the **"Emergency Steering"** warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- In emergency steering situation, steering is assisted by the function to help prevent collision with the front-side vehicle.
- The function will operate when your vehicle speed is between about 40-145 km/h (25-90 mph) and front-side vehicle and powered two-wheeler is driving.

⚠ CAUTION

- Lane-Change Side function does not operate if the vehicle speed of the preceding vehicle or powered two-wheeler from the front side is 0 km/h (0 mph).
- The detecting range of the front corner radar and the rear corner radar is determined by a standard road width, therefore, on a narrow road, Lane-Change Side function may detect other vehicles two lanes over and warn you. In contrast, on a wide road, Lane-Change Side function may not be able to detect a vehicle driving in the next lane and may not warn you.
- Lane-Change Side function will be canceled under the following circumstances:
 - Your vehicle enters the next lane by a certain distance.
 - Your vehicle is away from the collision risk.
 - The steering wheel is sharply steered.
 - The brake pedal is depressed.
 - Forward Collision-avoidance assist is operating.
- After Lane-Change Side function operation or lane change, you must drive to the center of the lane. Lane-Change Side function will not operate if the vehicle is not driven in the center of the lane.

i Information

When an additional collision is expected, Lane-Change Side function will not assist with steering and only warn the driver of a collision.

Evasive Steering Assist function

 If equipped

Evasive Steering Assist function will warn and control the vehicle with 'Emergency steering'.

Emergency Steering (Driver steering assist)



- To warn the driver that emergency steering will be assisted, Emergency Steering warning light (🚨) blinking, the **"Emergency Steering"** message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- If there is a risk of collision with a vehicle, powered two-wheeler, pedestrian and cyclist in front, the steering will be assisted to help prevent collision when the driver steers the vehicle to avoid collision.
- The function will operate when your vehicle speed is between about 40-85 km/h (25-53 mph).

Emergency Steering (Evasive steering assist)



- To warn the driver that emergency steering will be assisted, Emergency Steering warning light (🚨) blinking, the **"Emergency Steering"** message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate.
- If there is high risk of collision with a pedestrian, cyclist or powered two-wheeler in front, and the vehicle speed to operate emergency braking is within the operation range, the steering will be assisted to help prevent collision when there is space to avoid collision in the driving lane.
- The function will operate when your vehicle speed is between about 65-75 km/h (40-47 mph).
- The recognized pedestrian or cyclist moves in the same direction as your vehicle, or in the opposite direction. In addition, there is sufficient space for an evasive movement for your vehicle. However, this function may not operate for pedestrians or cyclists moving in the horizontal direction.

CAUTION

- The steering wheel may turn automatically when emergency steering is operating.
- Emergency steering will automatically cancel when risk factors disappear. If necessary, the driver must steer the vehicle.
- Emergency steering may not operate or may cancel during operation if the steering wheel is held tight or steered in the opposite direction.
- When steering is assisted to avoid collision with a vehicle, powered two-wheeler, pedestrian and cyclist, Evasive steering assist will be cancelled if collisions with other objects (vehicles, powered two-wheeler, pedestrians, or cyclists) are expected.
- Evasive steering assist may not operate if space to avoid collision in the driving lane is insufficient.
- When driving at night, the detecting performance of powered two-wheeler may decrease and temporarily limit or disable Front Collision-Avoidance Assist.

Information

For more information on warning messages, refer to Collision Warning in "Forward Collision-Avoidance Assist Operation" section in this chapter.

WARNING

- For your safety, only change the Settings after parking the vehicle at a safe location.
- Forward Collision-Avoidance Assist does not operate in all situations and cannot avoid all collisions.
- The driver has the responsibility to control the vehicle. Do not solely depend on Forward Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Forward Collision-Avoidance Assist on people, objects, etc. It may cause serious injury or death.
- Forward Collision-Avoidance Assist may not operate if the driver depresses the brake pedal to avoid collision.
- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.

- If any other system's warning message appears or audible warning is generated, Forward Collision-Avoidance Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
- Forward Collision-Avoidance Assist may turn off or may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.
- Even if there is a problem with Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.
- During emergency braking, braking control by Forward Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.

CAUTION

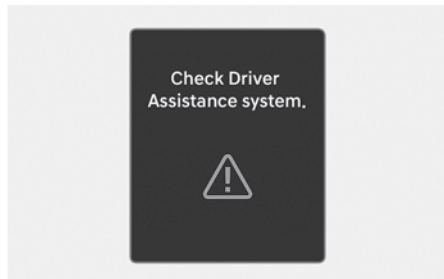
- Depending on the condition of the vehicle, powered two-wheeler, pedestrian, or cyclist in front and the surroundings, the speed range to operate Forward Collision-Avoidance Assist may reduce. Forward Collision-Avoidance Assist may only warn the driver, or it may not operate.
- Forward Collision-Avoidance Assist will operate under certain conditions by judging the risk level based on the condition of the oncoming vehicle, driving direction, speed and surroundings.
- Only Forward Collision-Avoidance Assist warning and collision mitigation are possible depending on the detectable distance.

Information

- In a situation where collision is imminent, braking may be assisted by Forward Collision-Avoidance Assist when braking is insufficient by the driver.
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the settings menu.

Forward Collision-Avoidance Assist Malfunction and Limitations

Forward Collision-Avoidance Assist malfunction

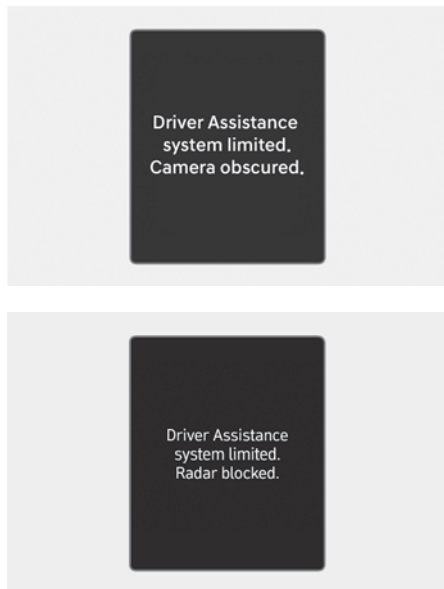


When Forward Collision-Avoidance Assist is not working properly, the **Check Driver Assistance system.** warning message will appear, and the , , or  warning lights will illuminate on the instrument cluster. Have your vehicle inspected by an authorized HYUNDAI dealer.

Information

You can check the warning in the service message of the Utility view on the cluster.

Forward Collision-Avoidance Assist disabled



When the front windshield where the front view camera is located, front radar cover, bumper (if equipped) or sensor is covered with foreign material or obscured by weather conditions, it can reduce the detecting performance and temporarily limit or disable Forward Collision-Avoidance Assist.

If this occurs the "**Driver Assistance system limited. Camera obscured.**" or the "**Driver Assistance system limited. Radar blocked.**" warning message, and the 🚧, 🌧️, or the ⚠️ warning lights will illuminate on the instrument cluster.

Forward Collision-Avoidance Assist will operate properly when snow, rain or foreign material is removed.

If Forward Collision-Avoidance Assist does not operate properly after obstruction (snow, rain, or foreign material) is removed (including trailer, carrier, etc., from the rear bumper), have your vehicle inspected by an authorized HYUNDAI dealer.

i Information

You can check the warning in the service message of the Utility view on the cluster.

⚠️ WARNING

- Even though the warning message or warning light does not appear on the instrument cluster, Forward Collision-Avoidance Assist may not properly operate.
- Forward Collision-Avoidance Assist may not properly operate in an area (for example, open terrain), where any objects are not detected after turning ON the vehicle.

Limitations of Forward Collision-Avoidance Assist

Forward Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- The detecting sensor or the surroundings are contaminated or damaged
- The temperature around the front view camera is high or low due to surrounding environment
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- Washer fluid is continuously sprayed, or the wiper is on
- Driving in heavy rain or snow, or thick fog
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming traffic is reflected on the wet road surface, such as a puddle on the road
- An object is placed on the dashboard

- Your vehicle is being towed
- The surrounding is very bright
- The surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlights are not on or are not bright
- Driving through steam, smoke or shadow
- Only part of the vehicle, powered two-wheeler, pedestrian or cyclist is detected
- The vehicle or powered two-wheeler in front is a bus, heavy truck, truck with an unusually shaped cargo, trailer, etc.
- The vehicle or powered two-wheeler in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lights are not on or are not bright
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visible, etc.
- The front vehicle's ground clearance is low or high
- A vehicle, powered two-wheeler, pedestrian or cyclist suddenly cuts in front
- The bumper around the front radar is impacted, damaged or the front radar is out of position
- The temperature around the front radar is high or low
- Driving through a tunnel or iron bridge
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- A material is near that reflects very well on the front radar, such as a guardrail, nearby vehicle, etc.
- The cyclist in front is on a bicycle made of material that does not reflect on the front radar
- The vehicle or powered two-wheeler in front is detected late
- The vehicle or powered two-wheeler in front is suddenly blocked by an obstacle
- The vehicle or powered two-wheeler in front suddenly changes lane or suddenly reduces speed
- The vehicle or powered two-wheeler in front is bent out of shape
- The vehicle in front is covered with snow
- You are departing or returning to the lane
- Unstable driving
- You are on a roundabout and the vehicle or powered two-wheeler in front is not detected
- You are continuously driving in a circle
- The vehicle in front has an unusual shape
- The vehicle in front is driving uphill or downhill
- The pedestrian or cyclist is not fully detected, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian or cyclist is wearing clothing or equipment that makes it difficult to detect



The illustration above shows the image the front view camera and front radar are capable of detecting as a vehicle, pedestrian and cyclist.

- The pedestrian or cyclist in front is moving very quickly

- The pedestrian or cyclist in front is short or is posing a low posture
- The pedestrian or cyclist in front has impaired mobility
- The pedestrian or cyclist in front is moving intersected with the driving direction
- There is a group of pedestrians, cyclists or a large crowd in front
- The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
- The pedestrian or cyclist is difficult to distinguish from the similarly shaped structure in the surroundings
- You are driving by a pedestrian, cyclist, traffic signs, structures, etc., near the intersection
- Driving in a parking lot
- Driving through a tollbooth, construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
- Driving on an incline road, curved road, etc.
- Driving through a roadside with trees or streetlights
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Driving through a narrow road where trees or grass are overgrown
- There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise
- The vehicle is installed with a snow chain, spare tire or different size wheel.

Junction Crossing, Lane-Change Oncoming, Lane-Change Side, Evasive Steering Assist function

 if equipped

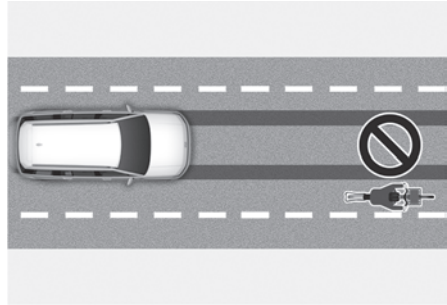
- The temperature around the front corner radar or rear corner radar is high or low
- A trailer or carrier is installed around the rear corner radar
- The front corner radar or rear corner radar is covered with snow, rain, dirt, etc.
- The bumper around the front corner radar or rear corner radar is covered with objects, such as a bumper sticker, bumper guard, bike rack, etc.
- The bumper around the front corner radar or rear corner radar is impacted, damaged or the radar is out of position
- The front corner radar or rear corner radar is blocked by other vehicles, walls or pillars
- Driving on a highway (or motorway) ramp or driving through a tollgate
- Driving on a road where the guardrail or wall is in double structure
- The other vehicle drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity
- The speed of the other vehicle is very fast that it passes by your vehicle in a short time
- Your vehicle passes by the other vehicle
- Your vehicle has started at the same time as the vehicle next to you and has accelerated
- The vehicle in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- A motorcycle or bicycle is detected
- A vehicle such as a flat trailer is detected

- A big vehicle such as a bus or truck is detected
- A small moving obstacle such as a pedestrian, animal, shopping cart or a baby stroller is detected
- A vehicle with low height such as a sports car is detected
- The lane is difficult to see due to foreign material, such as rain, snow, dust, sand, oil and water puddles
- The color of the lane marking is not distinguishable from the road
- There are markings on the road near the lane or the markings on the road looks similar to the lane markings
- The shadow is on the lane marking by a median strip, trees, guardrail, noise barriers, etc.
- The lane number increases or decreases, or the lane markings are crossing
- There are more than two lane markings on the road
- The lane markings are complicated or a structure substitutes for the lines, such as a construction area
- There are road markings, such as zigzag lanes, crosswalk markings and road signs
- The lane suddenly disappears, such as at the intersection
- The lane is very wide or narrow
- There is a curb or road edges without a lane
- The vehicle in front is driving with one side on the lane marking
- The distance to the front vehicle is extremely short

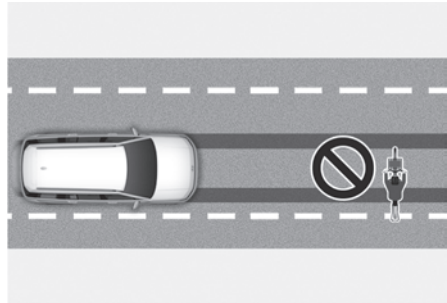
Limitations of Evasive Steering Assist

Evasive Steering Assist function may not work properly in the following situations when:

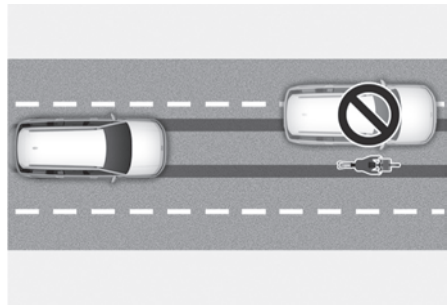
- The pedestrians or cyclists are positioned outside of the operating area.



- The pedestrians or cyclists are moving laterally.

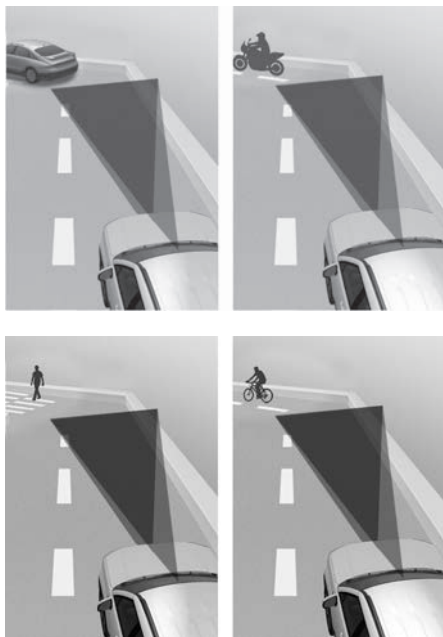


- The pedestrians or cyclists are positioned inside of the operating area, but there is not enough space available for evasive steering.



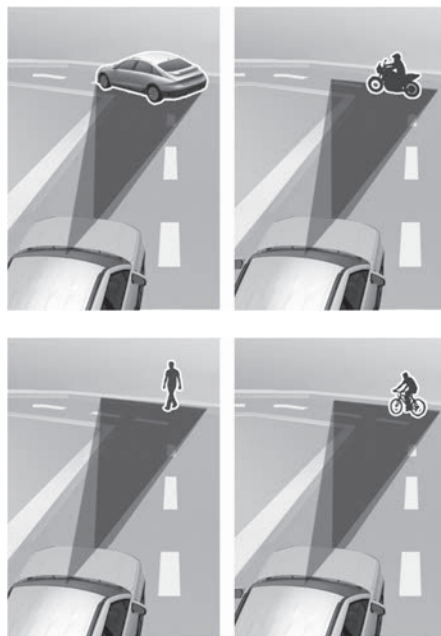
⚠ WARNING

• Driving on a curved road



Forward Collision-Avoidance Assist may not detect other vehicles, powered two-wheelers, pedestrians or cyclists in front of you when driving on curved roads adversely affecting the performance of the sensors. This may result in no warning, braking assist or steering assist (if equipped) when necessary.

When driving on a curve, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



Forward Collision-Avoidance Assist may detect a vehicle, powered two-wheeler, pedestrian or cyclist in the next lane or outside the lane when driving on a curved road.

If this occurs, Forward Collision-Avoidance Assist may unnecessarily warn the driver and control the brake or steering (if equipped). Always check the traffic conditions around the vehicle.

- **Driving on an inclined road**



Forward Collision-Avoidance Assist may not detect other vehicles, powered two-wheelers, pedestrians or cyclists in front of you while driving uphill or downhill, adversely affecting the performance of the sensors.

This may result in unnecessary warning, braking assist or steering assist (if equipped) or no warning, braking assist or steering assist (if equipped) when necessary.

Also, vehicle speed may rapidly decrease when a vehicle, powered two-wheeler, pedestrian or cyclist ahead is suddenly detected.

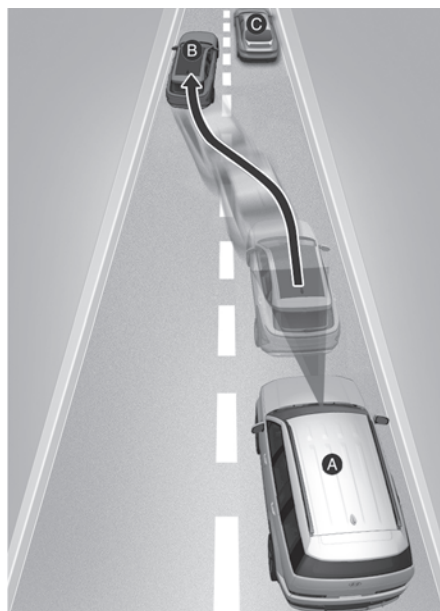
Always have your eyes on the road while driving uphill or downhill and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

• Changing lanes



[A] Your vehicle
[B] Lane changing vehicle

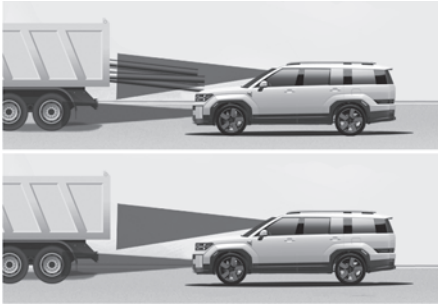
When a vehicle or powered two-wheeler moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Forward Collision-Avoidance Assist may not immediately detect the vehicle or powered two-wheeler when the vehicle or powered two-wheeler changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



[A] Your vehicle
[B] Lane changing vehicle
[C] Same lane vehicle

When a vehicle in front of you merges out of the lane, Forward Collision-Avoidance Assist may not immediately detect the vehicle or powered two-wheeler that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

• Detecting vehicle



If the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance, additional special attention is required. Forward Collision-Avoidance Assist may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain distance.

WARNING

- When you are towing a trailer or another vehicle, turn off Forward Collision-Avoidance Assist for safety reasons.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles, powered two-wheelers, pedestrians and cyclists are detected.
- Forward Collision-Avoidance Assist does not operate on bicycles, or smaller wheeled objects, such as luggage bags, shopping carts, or strollers.
- Forward Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
- Forward Collision-Avoidance Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

Information

For limitations in the driver's blind spot areas and precautions for the rear corner radars, refer to the "Blind-Spot Collision-Avoidance Assist (BCA)" section in this chapter.

Lane Keeping Assist (LKA)

Lane Keeping Assist uses the front view camera to help detect lane markings (or road edges) while driving over a certain speed. Lane Keeping Assist may warn you if your vehicle leaves the lane without using the turn signal and may steer the vehicle to help prevent it from departing its travel lane.

WARNING

Always monitor your vehicle speed and the distance to vehicles ahead on the road. Lane Keeping Assist is not a substitute for safe driving practices, but a supplemental function only.

Information

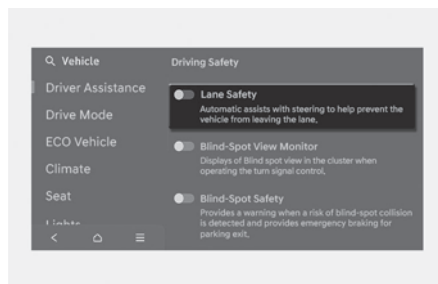
Lane Keeping Assist uses the following sensor:

- Front view camera

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Lane Keeping Assist settings

Lane Safety



With the engine on, select **Setup > Vehicle > Driver Assistance > Driving Safety > Lane Safety** in the infotainment system to set whether to use each function.

If **Lane Safety** is selected, Lane Keeping Assist automatically assists the driver's steering when lane departure is detected to help prevent the vehicle from moving out of its lane. If **Lane Safety** is deselected, Lane Keeping Assist turns off.

WARNING

- Lane Keeping Assist does not control the steering wheel when the vehicle is driven in the middle of the lane.
- The driver should always be aware of the surroundings. If **Lane Safety** is deselected, Lane Keeping Assist cannot assist you.

CAUTION

When the trailer's connector is plugged into your vehicle, Lane Following Assist automatically turns off. In this case, you cannot get help from Lane Following Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

i Information

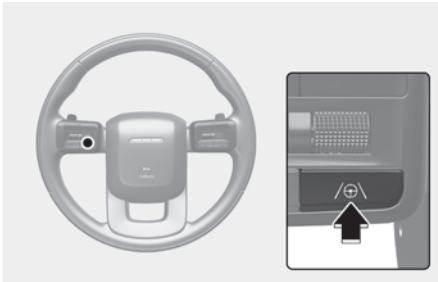
You can set the following Warning Methods:

- Warning Volume/Haptic Warning/Lane Safety Audible Warning Off/Driving Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

Lane Keeping Assist Operation

Turning Lane Keeping Assist On/Off



- With the engine on, shortly press the Lane Driving Assist button located on the steering wheel to turn on Lane Following Assist. The gray or green (⊕) indicator light will illuminate on the instrument cluster.

i Information

- When Lane Driving Assist is ready to operate, the (⊕) indicator turns gray on the cluster.
- When Lane Driving Assist is operating, the (⊕) indicator turns green on the cluster.

Warning and control

Lane Keeping Assist will warn and control the vehicle with Lane Departure Warning and Lane Keeping Assist.

Left



Right



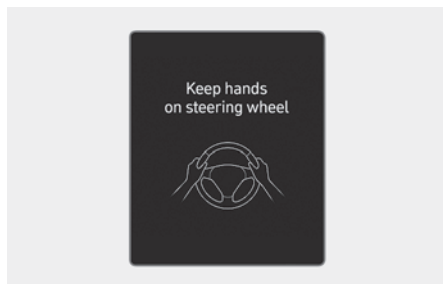
Lane Departure Warning

- To warn the driver that the vehicle is departing from the projected lane in front, the green (⊕) indicator light blinks on the instrument cluster, the lane line blinks on the instrument cluster depending on which direction the vehicle is veering, an audible warning sounds, and the steering wheel vibrates.
- Lane Departure Warning operates when your vehicle speed is between about 60-200 km/h (40-120 mph).

Lane Keeping Assist

- To warn the driver that the vehicle is departing from the projected lane in front, the green (LKA) indicator light blinks on the cluster, and the steering wheel makes adjustments to keep vehicle inside the lane.
- Lane Keeping Assist operates when your vehicle speed is between about 60-200 km/h (40-120 mph).

Hands-off warning



If the driver takes their hands off the steering wheel for several seconds, the **"Keep hands on steering wheel"** warning message appears on the instrument cluster, and an audible warning sounds in stages.

WARNING

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Keeping Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If the steering wheel is held very lightly, the hands-off warning message may appear because Lane Keeping Assist may not recognize that the driver has their hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

i Information

- You can steer your vehicle even when steering is assisted by Lane Keeping Assist.
- It may require more or less force to turn the steering wheel when Lane Keeping Assist is providing steering assistance.

Lane undetected



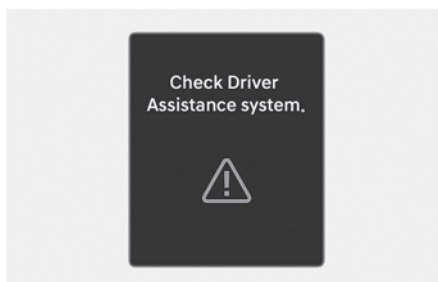
Lane detected



- For more information on instrument cluster settings, refer to the "Cluster display control" section in chapter 4.

Lane Keeping Assist Malfunction and Limitations

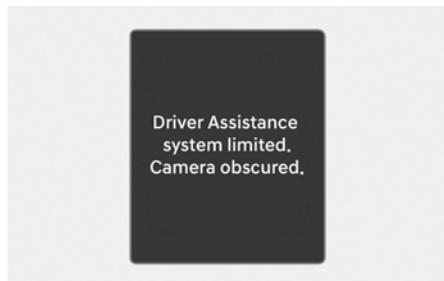
Lane Keeping Assist malfunction



When Lane Keeping Assist is not working properly, the **"Check Driver Assistance system."** warning message appears, the master (⚠) warning light and the yellow Lane Safety (🚧) indicator light illuminates on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

- When lane markings (or road edges) are detected, the lane lines on the instrument cluster changes from grey to white.
- When the lane markings (or road edges) are detected and Highway Lane Change Assist is on, the lane lines on the cluster may change to green. (if equipped)
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the instrument cluster.

Lane Keeping Assist disabled



When the front windshield where the front view camera is located, or sensor is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Lane Keeping Assist.

If this occurs, the **"Driver Assistance system limited. Camera obscured."** warning message and master (⚠) light or Lane Safety (🚧) warning light appears on the instrument cluster.

Lane Keeping Assist operates properly when snow, rain or foreign material is removed.

If Lane Keeping Assist does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

- Even though the warning message or warning light does not appear on the instrument cluster, Lane Keeping Assist may not properly operate.

Limitations of Lane Keeping Assist

Lane Keeping Assist may not operate properly or may operate unexpectedly under the following circumstances:

- The lane is contaminated or difficult to detect because:
 - The lane markings (or road edge) are covered with rain, snow, dirt, oil, etc.
 - The color of the lane marking (or road edge) is not distinguishable from the road
 - There are markings (or road edges) on the road near the lane or the markings (or road edges) on the road look similar to the lane markings (or road edge)
 - The lane marking (or road edge) is indistinct or damaged
 - The shadow is on the lane marking (or road edge) by a median strip, trees, guardrail, noise barriers, etc.
- The lane number increases or decreases, or the lane markings (or road edges) are crossing
- There are more than two lane markings (or road edges) on the road
- The lane markings (or road edges) are complicated or a structure substitutes for the lines, such as a construction area
- There are road markings, such as zigzag lanes, crosswalk markings and road signs

- The lane suddenly disappears, such as at the intersection
- The lane (or road width) is very wide or narrow
- There is a road edge without a lane
- There is a boundary structure in the roadway, such as a tollbooth, sidewalk, curb, etc.
- The distance to the front vehicle is extremely short or the vehicle in front is covering the lane marking (or road edge)

Information

For more information on the limitations of the front view camera, refer to the "Forward Collision-Avoidance Assist (FCA)" section in this chapter.

WARNING

Take the following precautions when using Lane Keeping Assist:

- The driver has the responsibility to safely drive and control the vehicle. Do not solely rely on Lane Keeping Assist.
 - The operation of Lane Keeping Assist can be cancelled or not work properly depending on road conditions and surroundings. Always be cautious while driving.
 - Refer to the "Limitations of Lane Keeping Assist" if the lane is not detected properly.
 - When you are towing a trailer or another vehicle, turn off Lane Keeping Assist for safety reasons.
 - If the vehicle is driven at high speed, the steering wheel will not be controlled. The driver must always follow the speed limit when using Lane Keeping Assist.
 - If any other system's warning message appears or audible warning is generated, Lane Keeping Assist warning message may not be displayed and audible warning may not be generated.
 - You may not hear the warning sound of Lane Keeping Assist if the surrounding is noisy.
 - If you attach objects to the steering wheel, steering may not be assisted properly.
 - Lane Keeping Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.
 - Lane Keeping Assist will not operate when:
 - The turn signal or hazard warning flasher is turned on.
 - The vehicle is not driven in the center of the lane when Lane Keeping Assist is turned on or right after changing a lane.
 - ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
 - The vehicle is driven on a sharp curve.
 - Vehicle speed is below 55 km/h (35 mph) or above 210 km/h (130 mph).
 - The vehicle makes sudden lane changes.
 - The vehicle brakes suddenly.
 - Driving stability may decrease when the vehicle is overloaded or the weight distribution is uneven. This may degrade the Lane Keeping Assist performance.
-

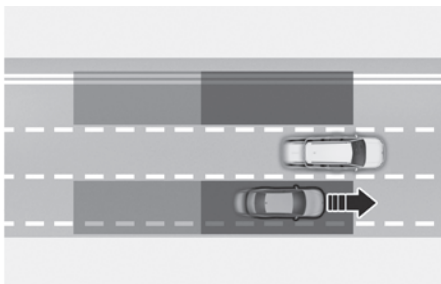
Blind-Spot Collision-Avoidance Assist (BCA)

 if equipped

Blind-Spot Collision-Avoidance Assist detects approaching vehicles in the driver's blind spot areas and warn you of a possible collision with a warning light and a warning sound.

If there is a collision risk when exiting a parallel space, Blind-Spot Collision-Avoidance Assist may assist with braking your vehicle to help avoid a collision.

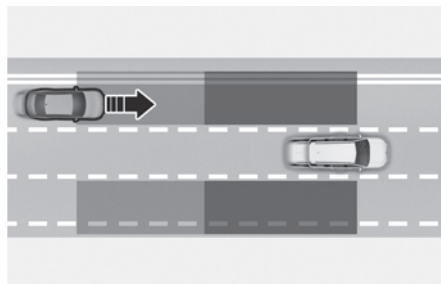
Blind-Spot Collision-Avoidance Assist helps detect and informs the driver that a vehicle is in the blind spot.



CAUTION

The detecting range may vary depending on the speed of your vehicle. Even if there is a vehicle in the blind spot area, Blind-Spot Collision-Avoidance Assist may not warn you when you pass by at high speeds.

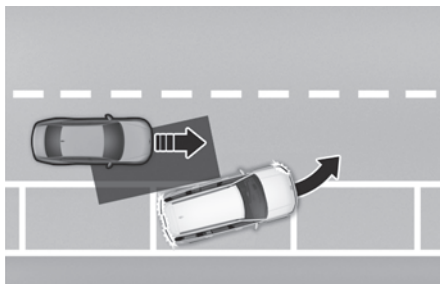
Blind-Spot Collision-Avoidance Assist helps detect and informs the driver that a vehicle is approaching at high speed from the blind spot area.



CAUTION

Warning timing may vary depending on the speed of the vehicle approaching at high speed.

When you are driving forward out of a parking space, if Blind-Spot Collision-Avoidance Assist judges that there is a collision risk with an approaching vehicle in the blind spot, it can help avoid collision by applying the brake.



Information

For more information on driver's steering assist for Blind-Spot Collision-Avoidance Assist, refer to the "Lane-Change Side function" section in this chapter.

i Information

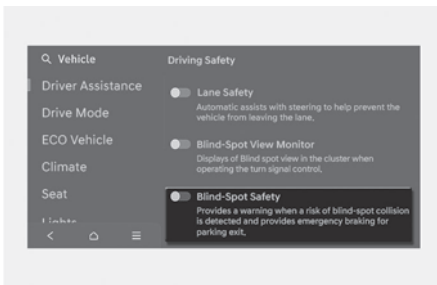
Blind-Spot Collision-Avoidance Assist uses the following sensors:

- Rear corner radars

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

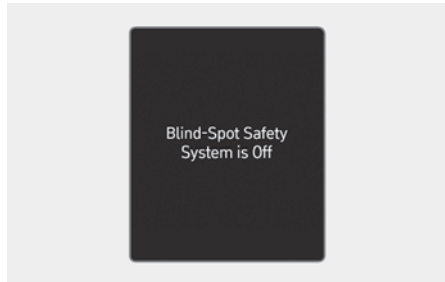
Blind-Spot Collision-Avoidance Assist settings

Blind-Spot Safety



With the engine on, select **Setup > Vehicle > Driver Assistance > Driving Safety > Blind-Spot Safety** in the infotainment system to set whether to use each function.

- If **Blind-Spot Safety** is selected, Blind-Spot Collision Avoidance Assist warns the driver with a warning message, an audible warning depending on the collision risk levels. Braking assist is applied for parking exit depending on the collision risk levels.



When the vehicle is restarted with Blind-Spot Collision-Avoidance Assist off, the "**Blind-Spot Safety System is Off**" message will appear on the instrument cluster.

If you select "**Blind-Spot Safety**", warning light on the side view mirror will blink for three seconds. In addition, if the vehicle is turned on, when "**Blind-Spot Safety**" is selected, the warning light on the side view mirror blinks for three seconds.

WARNING

The driver should always be aware of the surroundings and drive safely. If "**Blind-Spot Safety**" is deselected, Blind-Spot Collision-Avoidance Assist cannot assist you.

i Information

If the vehicle is restarted, Blind-Spot Collision-Avoidance Assist maintains the last setting.

CAUTION

When the trailer's connector is plugged into your vehicle, Blind-Spot Collision-Avoidance Assist automatically turns off. In this case, you cannot get help from Blind-Spot Collision-Avoidance Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

Information

You can set the following Warning Methods:

- Warning Volume/Haptic Warning/Driving Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

Blind-Spot Collision-Avoidance Assist Operation

Collision Warning (while driving)



To warn the driver a vehicle is detected, the warning light on the side view mirror illuminates and head-up display (if equipped) may illuminate. Vehicle detection operates under following conditions.

- Your vehicle speed: above 20 km/h (12 mph)
- Vehicle in the blind spot area: above 10 km/h (7 mph)

Collision Warning operates when the turn signal is turned on in the direction of the detected vehicle.

- To warn you of a potential collision, the warning light on the side view mirror and head-up display (if equipped) may blink, an audible warning may sound, and the steering wheel may vibrate.
- When the turn signal is turned off, the collision warning is canceled and Blind-Spot Collision Avoidance Assist returns to vehicle detection state.

Collision Warning operates under following conditions.

- Your vehicle speed: above 40 km/h (25 mph)
- Vehicle in the blind spot area: above 10 km/h (7 mph)

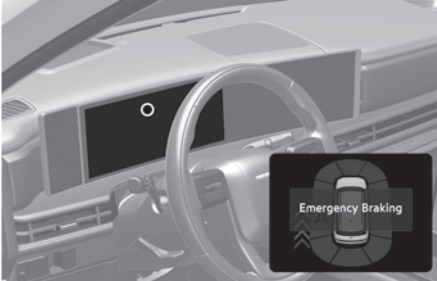
WARNING

- The detecting range of the rear corner radar is determined by a standard road width, therefore, on a narrow road, Blind-Spot Collision-Avoidance Assist may detect other vehicles two lanes over and warn you. In contrast, on a wide road, Blind-Spot Collision-Avoidance Assist may not be able to detect a vehicle driving in the next lane and may not warn you.
- When the hazard warning flasher is on, the collision warning by the turn signal will not operate.

Information

The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the settings menu.

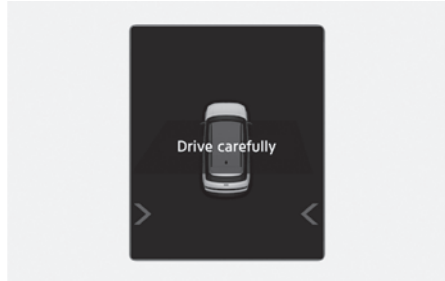
Collision-Avoidance Assist (while exiting parallel spot)



- To warn the driver of a collision, the warning light on the side view mirror will blink and a warning message will appear on the instrument cluster. At the same time, an audible warning will sound, warning light will blink and the steering wheel will vibrate.
- Emergency Braking will be assisted to help prevent collision with the vehicle in the blind spot area.
- Blind-Spot Collision-Avoidance Assist will operate when your vehicle speed is below 3 km/h (2 mph) and the speed of the vehicle in the blind spot area is above 5 km/h (3 mph).

- When the vehicle is stopped due to emergency braking, the "**Drive carefully**" warning message will appear on the instrument cluster.

For your safety, the driver should depress the brake pedal immediately and check the surroundings.



- Brake control will end after approximately 2 seconds of emergency brake control.
- During braking control by the Blind-Spot Collision-Avoidance Assist, braking control will end when the driver operates the brake pedal with sufficient force.

WARNING

Take the following precautions when using Blind-Spot Collision-Avoidance Assist:

- For your safety, only change the Settings after parking the vehicle at a safe location.
- If any other system's warning message appears or audible warning is generated, Blind-Spot Collision-Avoidance Assist's warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Blind-Spot Collision-Avoidance Assist if the surrounding is noisy.
- Blind-Spot Collision-Avoidance Assist may not operate if the driver applies the brake pedal to avoid a collision.
- When Blind-Spot Collision-Avoidance Assist is operating, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.
- During Blind-Spot Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Blind-Spot Collision-Avoidance Assist, the vehicle's basic braking will function normally.
- Blind-Spot Collision-Avoidance Assist does not operate in all situations and cannot avoid all collisions.
- Blind-Spot Collision-Avoidance Assist may warn the driver late or may not warn the driver depending on the road and driving conditions.
- Driver should maintain control of the vehicle at all times. Do not depend on Blind-Spot Collision-Avoidance Assist. Maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never operate Blind-Spot Collision-Avoidance Assist on people, animal, objects, etc. It may cause serious injury or death.

WARNING

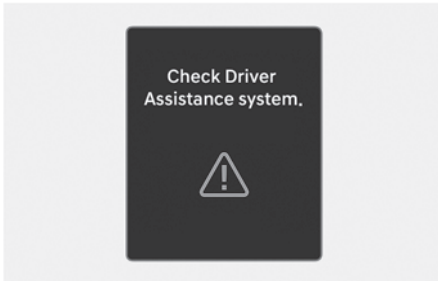
The brake control may not operate properly depending on the status of ESC (Electronic Stability Control).

There will only be a warning when:

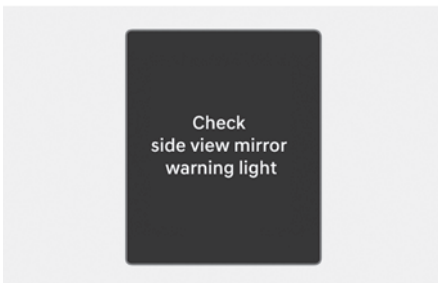
- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged in a different function

Blind-Spot Collision-Avoidance Assist Malfunction and Limitations

Blind-Spot Collision-Avoidance Assist malfunction

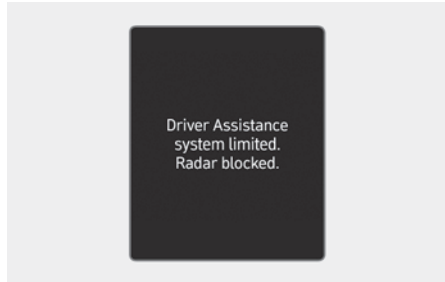


When Blind-Spot Collision-Avoidance Assist is not working properly, the "**Check Driver Assistance system.**" warning message will appear on the instrument cluster for several seconds, and the master (⚠) warning light will appear on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.



When the side view mirror warning light is not working properly, the "**Check side view mirror warning light**" warning message will appear on the instrument cluster for several seconds, and the master (⚠) warning light will illuminate on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

Blind-Spot Collision-Avoidance Assist disabled



When the rear bumper around the rear corner radar or sensor is covered with foreign material, such as snow or rain, or installing a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Blind-Spot Collision-Avoidance Assist.

If this occurs, the "**Driver Assistance system limited. Radar blocked.**" warning message will appear on the instrument cluster.

Blind-Spot Collision-Avoidance Assist will operate properly when such foreign material or trailer, etc., is removed, and then the vehicle is restarted.

If Blind-Spot Collision-Avoidance Assist does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

- Even though the warning message does not appear on the instrument cluster, Blind-Spot Collision-Avoidance Assist may not properly operate.
- Blind-Spot Collision-Avoidance Assist may not properly operate in an area (for example, open terrain) where any objects are not detected right after the vehicle is turned on, or when the detecting sensor is blocked with foreign material right after the vehicle is turned on.

CAUTION

Turn off Blind-Spot Collision-Avoidance Assist to install or remove a trailer, carrier, or another attachment. Turn on Blind-Spot Collision-Avoidance Assist when finished.

Limitations of Blind-Spot Collision-Avoidance Assist

Blind-Spot Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- There is inclement weather, such as heavy snow, heavy rain, etc.
- The rear corner radar is covered with snow, rain, dirt, etc.
- The temperature around the rear corner radar is high or low
- Driving on a highway ramp
- The road pavement (or the peripheral ground) abnormally contains metallic components (for example, possibly due to subway construction)
- There is a fixed object near the vehicle, such as sound barriers, guardrails, central dividers, entry barriers, street lamps, signs, tunnels, walls, etc. (including double structures)
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving through a narrow road where trees or grass are overgrown
- Driving on a wet road surface, such as a puddle on the road
- The other vehicle drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity

- The speed of the other vehicle is very fast that it passes by your vehicle in a short time
- Your vehicle passes by the other vehicle
- Your vehicle changes lane
- Your vehicle has started at the same time as the vehicle next to you and has accelerated
- The vehicle in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- A trailer, carrier or other attachment is installed around the rear corner radar
- The bumper around the rear corner radar is covered with objects, such as a bumper sticker, bumper guard, bike rack, etc.
- The bumper around the rear corner radar is impacted, damaged or the radar is out of position
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.

Blind-Spot Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly when the following objects are detected:

- A motorcycle or bicycle is detected
- A vehicle such as a flat trailer is detected
- A big vehicle such as a bus or truck is detected
- A moving obstacle such as a pedestrian, animal, shopping cart or a baby stroller is detected
- A vehicle with low height such as a sports car is detected

Braking control may not work, driver's attention is required in the following circumstances:

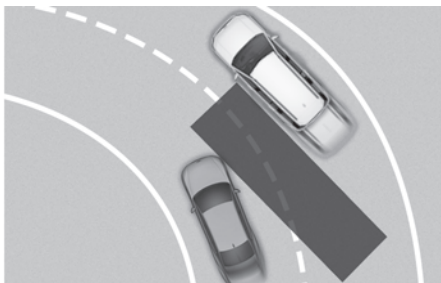
- The vehicle severely vibrates while driving over a bumpy road, uneven road or concrete patch
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- The tire pressure is low or a tire is damaged
- The braking system has been modified
- The vehicle makes abrupt lane changes

i Information

For more information on the limitations of the front view camera, refer to the "Forward Collision-Avoidance Assist (FCA)" and "Lane Keeping Assist (LKA)" section in this chapter.

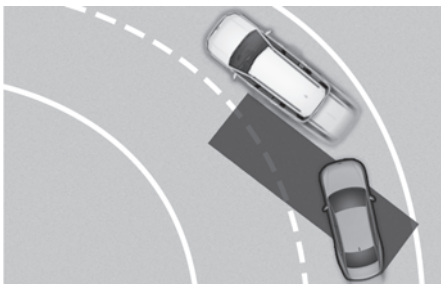
WARNING

• Driving on a curved road



Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a curved road. The function may not detect the vehicle in the next lane.

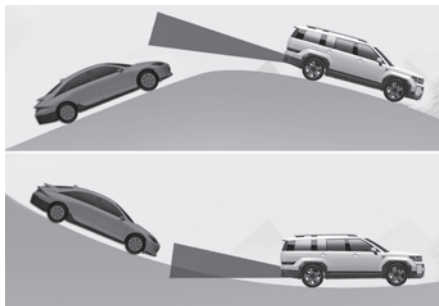
Always pay attention to road and driving conditions while driving.



Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a curved road. The function may recognize a vehicle in the same lane.

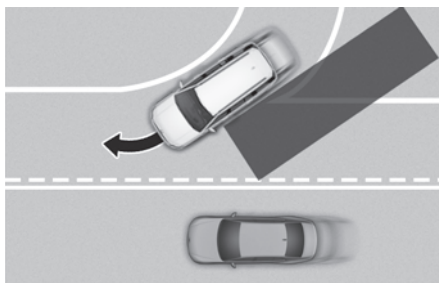
Always pay attention to road and driving conditions while driving.

• Driving on an inclined road



Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a slope. The function may not detect the vehicle in the next lane or may incorrectly detect the ground or structure. Always pay attention to road and driving conditions while driving.

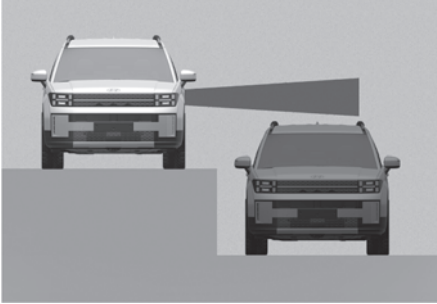
• Driving where the road is merging/dividing



Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the road merges or divides. The function may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions while driving.

- **Driving where the heights of the lanes are different**



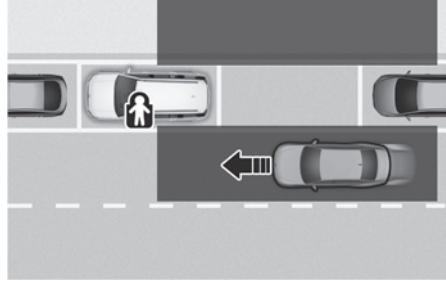
Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the heights of the lanes are different. The function may not detect the vehicle on a road with different lane heights (underpass joining section, grade separated intersections, etc.).

Always pay attention to road and driving conditions while driving.

WARNING

- When you are towing a trailer or another vehicle, make sure that you turn off Blind-Spot Collision-Avoidance Assist.
- Blind-Spot Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
- Blind-Spot Collision-Avoidance Assist may not operate for 3 seconds after the vehicle is started, or the front view camera or rear corner radars are initialized.

Safe Exit Assist (SEA)



While your vehicle is stopped, if Safe Exit Assist detects a vehicle approaching the rear corner of your vehicle and a passenger opens a door, Safe Exit Assist may warn you with a warning message and a warning sound to help avoid a collision.



When the electronic child safety lock (ECSL) button is in the LOCK position and an approaching vehicle from the rear area is detected, the electronic child safety lock button will not unlock even if the driver presses the button to prevent the rear doors from opening.

CAUTION

- Warning timing may vary depending on the speed of the approaching vehicle.
- Do not use Safe Exit Assist instead of the electronic child safety lock button. To protect rear seat passengers, use the electronic child safety lock button. For more information on, refer to the "Electronic child safety lock" section in chapter 5.

Information

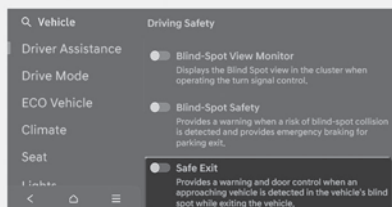
Safe Exit Assist uses the following sensor:

- Rear corner radars

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Safe Exit Assist settings

Safe Exit



With the engine on, select **Setup > Vehicle > Driver assistance > Driving Safety > Safe Exit** from the Settings menu to turn on Safe Exit Assist and deselect to turn off the function.

WARNING

The driver should always be aware of their surroundings. If "Safe Exit" is deselected, Safe Exit Assist cannot assist you.

Information

If the vehicle is restarted, Safe Exit Assist will maintain the previous setting.

CAUTION

When the trailer's connector is plugged into your vehicle, Safe Exit Assist automatically turns off. In this case, you cannot get help from Safe Exit Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

i Information

You can set the following Warning Methods:

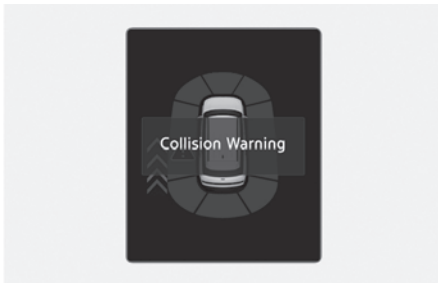
- Warning Volume/Driving Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

Safe Exit Assist operation

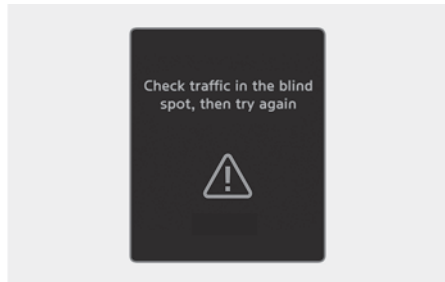
Safe Exit Assist

Collision warning when exiting vehicle



- When an approaching vehicle from the rear is detected at the moment a door is opened, the "**Collision Warning**" warning message appears on the instrument cluster, and an audible warning sounds.
- Safe Exit Assist warns the driver when your vehicle speed is below 3 km/h (1.8 mph), and the speed of the approaching vehicle from the rear is above 6 km/h (4 mph).

Safe Exit Assist linked with Electronic child safety lock



- When Electric child safety lock is operating and an approaching vehicle from the rear area is detected, the rear doors cannot be unlocked even if the driver tries to unlock the rear doors using the electronic child safety lock button. The warning light on the side view mirror will blink and the "**Check traffic in the blind spot, then try again**" warning message will appear on the instrument cluster.
- Safe Exit Assist will warn the driver when vehicle speed is below 3 km/h (1.8 mph), and the speed of the approaching vehicle from the rear is above 6 km/h (4 mph).

i Information

For more information on electric child safety lock (🔒) button, refer to the "Electronic child safety lock" section in chapter 5.

CAUTION

If the driver presses the electronic child lock (🔒) button again within 10 seconds after the warning message appears, Safe Exit Assist judges that the driver has unlocked the doors acknowledging the rear status. The electronic child safety lock will turn off (button indicator OFF) and the rear doors will unlock. Always check the surroundings before turning off the electronic child safety lock button.

i Information

If a rear door is opened from the outside, it will open regardless of Safe Exit Assist operation.

WARNING

Take the following precautions when using Safe Exit Assist:

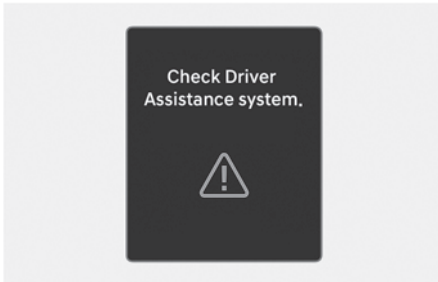
- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other system's warning message appears or an audible warning is generated, Safe Exit Assist warning message may not be displayed and an audible warning may not be generated.
- You may not hear the warning sound of Safe Exit Assist if the surroundings are noisy.
- Safe Exit Assist does not operate in all situations and cannot prevent all collisions.
- Safe Exit Assist may warn the driver late or may not warn the driver depending on the road and driving conditions. Always check vehicle surroundings.
- The driver and passengers are responsible for collisions that occur while exiting the vehicle. Always check the surroundings before you exit the vehicle.
- Never deliberately test Safe Exit Assist. Doing so may lead to serious injury or death.

i Information

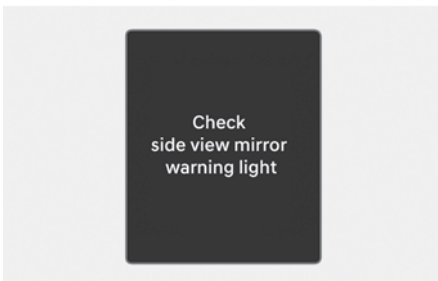
- After the engine is turned off, Safe Exit Assist operates about for 3 minutes, but turns off immediately if the doors are locked.
- The images and colours in the instrument cluster may differ depending on the instrument cluster type or theme selected from the settings menu.

Safe Exit Assist malfunction and limitations

Safe Exit Assist malfunction

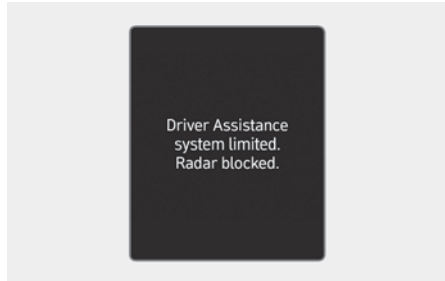


When Safe Exit Assist is not working properly, the "**Check Driver Assistance system.**" warning message appears on the instrument cluster for several seconds, and the master (△) warning light illuminates on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.



When the side view mirror warning light is not working properly, the "**Check side view mirror warning light**" warning message appears on the instrument cluster for several seconds, and the master (△) warning light illuminates on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

Safe Exit Assist disabled



When the rear bumper around the rear corner radar or sensor is covered with foreign material, such as snow or rain, or installing a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Safe Exit Assist.

If this occurs, the "**Driver Assistance system limited. Radar blocked.**" warning message appears on the cluster display for several seconds, and the master (△) warning light illuminates on the instrument cluster. But, it is not a malfunction.

Safe Exit Assist operates properly when such foreign material or trailer, etc., is removed, and then the vehicle is restarted.

If Safe Exit Assist does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

- Even though the warning message does not appear on the instrument cluster, Safe Exit Assist may not properly operate.
- Safe Exit Assist may not properly operate in an area (for example, open terrain) where objects are not detected immediately after the vehicle is turned on, or when the detecting sensor is blocked with foreign material immediately after the vehicle is turned on.

CAUTION

Turn off Safe Exit Assist to install or remove a trailer, carrier, or another attachment. Turn on Safe Exit Assist when finished.

Limitations of Safe Exit Assist

Safe Exit Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- Getting out of the vehicle where trees or grass are overgrown
- Getting out of the vehicle where the road is wet
- The approaching vehicle is very fast or very slow

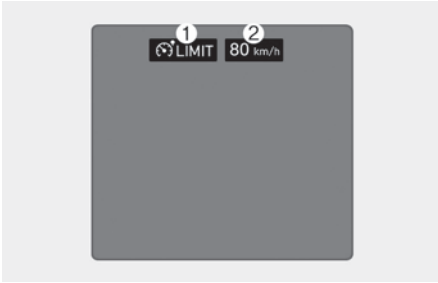
Information

For more information on the limitations of the rear corner radar, refer to the "Blind-Spot Collision-Avoidance Assist (BCA)".

WARNING

- Safe Exit Assist may not operate properly with interference from strong electromagnetic waves.
- Safe Exit Assist may not operate for about 3 seconds after the vehicle is started, or the rear corner radars are initialised.

Manual Speed Limit Assist (MSLA)



- (1) Speed Limit indicator
- (2) Set speed

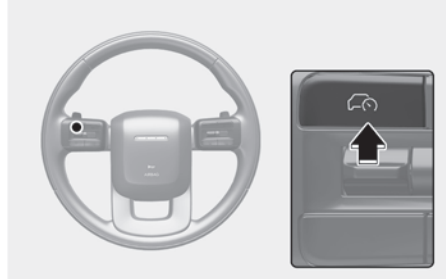
You can set the speed limit when you do not want to drive over a specific speed.

If you drive over the preset speed limit, Manual Speed Limit Assist will operate (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

Manual Speed Limit Assist Operation

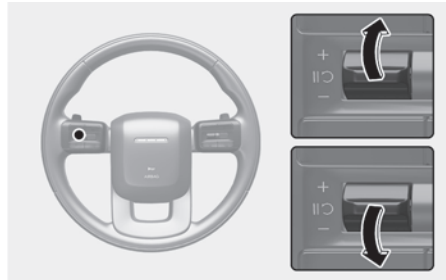
Setting speed limit

1. Press and hold the Driving Assist (🚗) button at the desired speed. The Speed Limit (LIMIT) indicator will appear on the cluster.



2. Push the **+** switch up or **-** switch down, and release it at the desired speed.

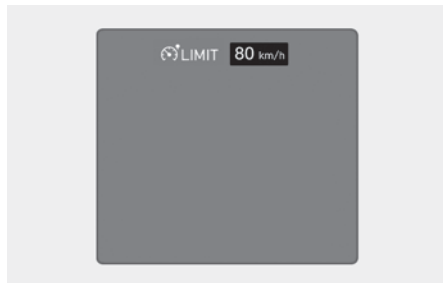
Push the **+** switch up or **-** switch down and hold it. The speed will increase or decrease to the nearest multiple of ten (multiple of five in mph) at first, and then increase or decrease by 10 km/h (5 mph).



3. The set speed limit will be displayed on the cluster.

If you would like to drive over the preset speed limit, depress the accelerator pedal beyond the pressure point to activate the kickdown function.

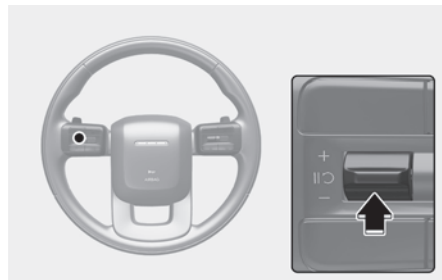
The set speed limit will blink and chime will sound until you return the vehicle speed within the speed limit.



i Information

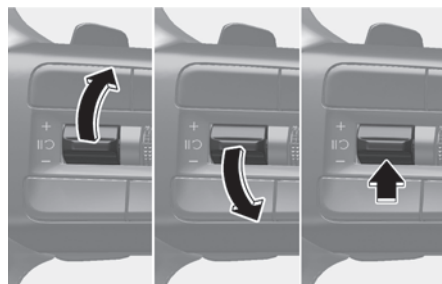
- When the accelerator pedal is not depressed beyond the pressure point, vehicle speed will maintain within the speed limit.
- The maximum setting speed varies depending on the vehicle specifications. The set speed cannot be increased beyond the maximum set speed.

Temporarily pausing Manual Speed Limit Assist



Press the  switch to temporarily pause the set speed limit. The set speed limit will turn off but the Speed Limit () indicator will stay on.

Resuming Manual Speed Limit Assist

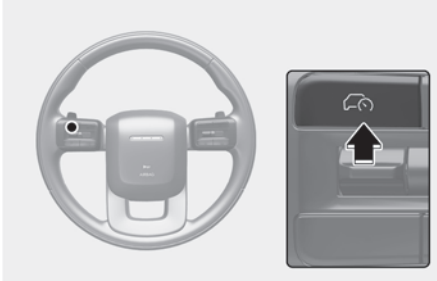


To resume Manual Speed Limit Assist after the function was paused, operate the **+**, **-**,  switch.

If you push the **+** switch up or **-** switch down, vehicle speed will be set to the current speed on the instrument cluster.

If you press the  switch, vehicle speed will resume to the preset speed.

Turning off Manual Speed Limit Assist



Press the Driving Assist (🚗) button to turn Manual Speed Limit Assist off. The Speed Limit (🚗LIMIT) indicator will go off. Always press the Driving Assist (🚗) button to turn Manual Speed Limit Assist off when not in use.

⚠ WARNING

Take the following precautions when using Manual Speed Limit Assist:

- Always set the vehicle speed to the speed limit in your area.
- Keep Manual Speed Limit Assist off when the function is not in use, to avoid inadvertently setting a speed. Check that the Speed Limit (🚗LIMIT) indicator is off.
- Manual Speed Limit Assist does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and be aware of unexpected and sudden situations. Pay attention to the road conditions at all times.

Intelligent Speed Limit Assist (ISLA)

Intelligent Speed Limit Assist uses information of road signs detected from the front view camera and uses the navigation system data to inform you of the speed limit and help maintain within the speed limit on the road.

⚠ WARNING

- Intelligent Speed Limit Assist may not operate properly if used in other countries.
- Intelligent Speed Limit Assist may not operate properly if the navigation system is not updated regularly. For more information, scan the QR code in a separately supplied simple manual.

i Information

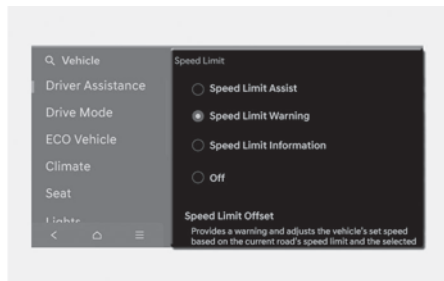
Intelligent Speed Limit Assist uses the following sensor:

- Front view camera

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Intelligent Speed Limit Assist Settings

Speed Limit



With the engine on, select or deselect **Setup > Vehicle > Driver Assistance > Speed Limit** from the infotainment system to set whether to use each function.

- **Select Country:** When the navigation system is not available, you can manually select the country to set the speed limit.
- **Speed Limit Offset:** Speed Limit Offset can be adjusted.

Speed Limit Warning and Speed Limit Assist will warn the driver and adjust the driving speed when vehicle speed exceeds the speed at which the set Offset is added to speed limit.

- **Speed Limit Assist:** Intelligent Speed Limit Assist will inform the driver of speed limit and additional road signs, and warn the driver if the vehicle speed is faster than the speed limit. In addition, Intelligent Speed Limit Assist will inform the driver to change set speed of Manual Speed Limit Assist and/or Smart Cruise Control to help the driver stay within the speed limit.

- **Speed Limit Warning:** Intelligent Speed Limit Assist will inform the driver of speed limit. In addition, Intelligent Speed Limit Assist will warn the driver when the vehicle is driven faster than the speed limit.
- **Speed Limit Information:** Intelligent Speed Limit Assist will inform the driver the current speed limit of the road.
- **Off:** Intelligent Speed Limit Assist will turn off.



WARNING

- For your safety, only change the Settings after parking the vehicle at a safe location.
- Intelligent Speed Limit Assist does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and be aware of unexpected and sudden situations. Pay attention to the road conditions at all times.



Information

- Speed Limit Assist function operates based on the Offset setting added to the speed limit. If you want to change the set speed according to the speed limit, adjust the offset to '0'.
- The setting of 'Speed Offset' is not reflected in Navigation-based Smart Cruise Control (NSCC).

Intelligent Speed Limit Assist Operation

Warning and control

Intelligent Speed Limit Assist will warn and control the vehicle speed by "Displaying speed limit", "Warning overspeed" and "Changing set speed".

i Information

- Intelligent Speed Limit Assist warning and control are described based on the Offset adjust to "0". For details on Offset setting, refer to the "Intelligent Speed Limit Assist Settings".

i Information

- If speed limit information of the road cannot be recognized, '---' sign will be displayed. Please refer to "Limitations of Intelligent Speed Limit Assist" if the road signs are difficult to recognize.
- Intelligent Speed Limit Assist provides additional road sign information in addition to speed limit. The additional road sign information provided may vary according to your country.
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the instrument cluster.

Displaying speed limit



Speed limit information is displayed on the instrument cluster.

Warning overspeed



When driving at a speed higher than the displayed speed limit, the speed limit is displayed in red.

Changing set speed



If the speed limit of the road changes during the operation of Manual Speed Limit Assist or Smart Cruise Control, an arrow in the direction of up or down is displayed to inform the driver that the set speed needs to be changed. At this time, the driver can change the set speed according to the speed limit by using the + or - switch on the steering wheel.

Set Speed Auto Change (if equipped with navigation)



Manual Speed Limit Assist or Smart Cruise Control assists the vehicle to adjust its speed according to the speed limit. When the cruising speed is set as same as the speed limit, the vehicle automatically adjusts its speed if the speed limit changes. The function operates on the road which has a speed limit of 70 km/h (45 mph) or higher. When the function is active, the cruising speed on the instrument cluster appears in green.

WARNING

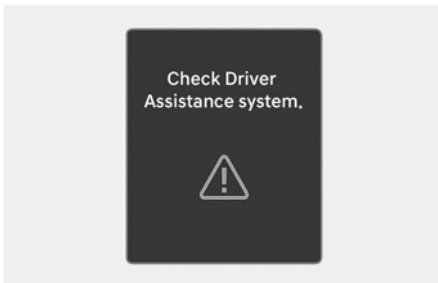
- If you want to drive below the speed limit, adjust the Offset under **0** or use the - switch on the steering wheel to lower the set speed.
- Even after changing the set speed according to the speed limit of the road, the vehicle can still be driven over the speed limit. If necessary, depress the brake pedal to reduce your driving speed.
- If the speed limit of the road is under 30 km/h (20 mph), the set speed change function will not work.
- Intelligent Speed Limit Assist operates using the speed units in the instrument cluster set by the driver. If the speed unit is not set to the speed unit used in your area, Intelligent Speed Limit Assist may not operate properly.

i Information

- For more information on Manual Speed Limit Assist operation, refer to the "Manual Speed Limit Assist (MSLA)" section in this chapter.
- For more information on Smart Cruise Control operation, refer to the "Smart Cruise Control (SCC)" section in this chapter.

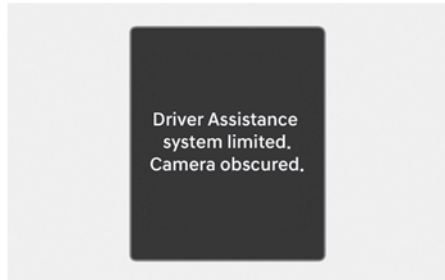
Intelligent Speed Limit Assist Malfunction and Limitations

Intelligent Speed Limit Assist malfunction



When Intelligent Speed Limit Assist is not working properly, the "**Check Driver Assistance system.**" warning message will appear on the instrument cluster for several seconds, and the master (⚠) warning light and (☐) warning light will illuminate on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

Intelligent Speed Limit Assist disabled



When Intelligent Speed Limit Assist is not working properly, the "**Check Driver Assistance system.**" warning message will appear on the instrument cluster for several seconds, and the master (⚠) warning light and (☐) warning light will illuminate on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

Intelligent Speed Limit Assist will operate properly when snow, rain or foreign material is removed.

If Intelligent Speed Limit Assist does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

- Even though the warning message or warning light does not appear on the instrument cluster, Intelligent Speed Limit Assist may not properly operate.

Limitations of Intelligent Speed Limit Assist

Intelligent Speed Limit Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- The road sign is contaminated or indistinguishable
- The road sign is difficult to see due to bad weather, such as rain, snow, fog, etc.
- The road sign is not clear or damaged
- The road sign is partially obscured by surrounding objects or shadow
- The road signs do not conform to the standard
- The text or illustration on the road sign is different from the standard
- The road sign is installed between the main line and the exit road or between diverging roads
- There is no conditional road signs on the road sign located on the exit road
- A sign is attached to another vehicle
- The distance between the vehicle and the road signs is too far
- The vehicle encounters illuminant road signs
- Intelligent Speed Limit Assist incorrectly recognizes numbers or illustrations in the street signs or other signs as the speed limit
- A road sign near the road you are driving is detected
- The other traffic sign or signboards are alongside the road sign
- Multiple signs are installed close together
- The minimum speed limit sign is misrecognized
- The minimum speed limit sign is on the road
- The brightness changes suddenly, for example when entering or exiting a tunnel or passing under a bridge
- Headlights are not used or the brightness of the headlights are weak at night or in the tunnel
- Road signs are difficult to recognize due to the reflection of sunlight, street lights, or oncoming vehicles
- The navigation information or GPS information contain errors.
- The driver does not follow the guide of the navigation.
- The driver is driving on a new road that is not in the navigation system yet.
- The field of view of the front view camera is obstructed by sun glare
- Driving on a road that is sharply curved or continuously curved
- Driving through speed bumps, or driving up and down or left to right on steep inclines
- The vehicle is shaking heavily
- Driving on a newly opened road
- The navigation software is being updated while driving
- The navigation is restarted while driving



WARNING

- Intelligent Speed Limit Assist is a supplemental function that helps the driver comply with the speed limit on the road, and may not display the correct speed limit or control the driving speed properly.
 - Always set the vehicle speed to the speed limit in your area.
 - Intelligent Speed Limit Assist may not operate for 15 seconds after the vehicle is started, or the front camera is initialized.
-



Information

For more information on the limitations of the front view camera, refer to the "Forward Collision-Avoidance Assist (FCA)" section in this chapter.

Driver Attention Warning (DAW)

Inattentive Driving Warning

Driver Attention Warning monitors your driving pattern while driving. When the driver's attention level is below a certain level, Driver Attention Warning recommends a break to help with safe driving.

Leading vehicle departure alert function

Leading Vehicle Departure Alert function will inform the driver when a detected vehicle in front departs.



Information

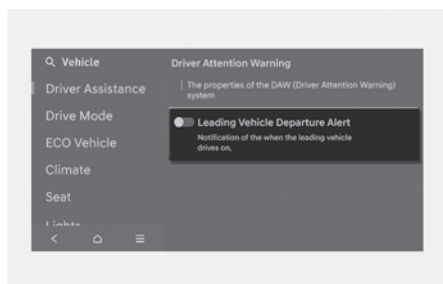
Driver Attention Warning uses the following sensor:

- Front view camera

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Driver Attention Warning Settings

Leading Vehicle Departure Alert



With the engine on, select or deselect **Setup > Vehicle > Driver Assistance > Driver Attention Warning** and then enable **Leading Vehicle Departure alert** in the infotainment system to set whether to use each function.

- If '**Leading Vehicle Departure Alert**' is selected, the function will inform the driver when a detected vehicle in front departs from a stop.

i Information

When the engine is restarted, Driver Attention Warning maintains the last setting.

i Information

You can set the following Warning Methods:

- Driving Safety Priority

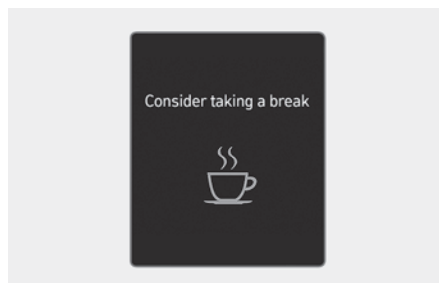
For more information, refer to the "Driver assistance system settings" section in this chapter.

Inattentive Driving Warning Operation

Inattentive Driving Warning

The basic function of Driver Attention Warning is to warn the driver "**Consider taking a break**".

Taking a break



- The "**Consider taking a break**" message will appear and the inattentive driving (☹️) warning light will blink on the cluster with a warning sound to suggest that the driver take a break, when the driver's attention level is below a certain level.
- Driver Attention Warning will not suggest a break when the total driving time is shorter than 4 minutes or 4 minutes has not passed after the last break was suggested.

WARNING

For your safety, change the Settings after parking the vehicle at a safe location.

CAUTION

- Driver Attention Warning may suggest a break depending on the driver's driving pattern or habits, even if the driver doesn't feel fatigue.
- Driver Attention Warning is a supplemental function and may not be able to determine whether the driver is inattentive.
- A driver who feels fatigued should take a break at a safe location, even though there is no break suggestion by Driver Attention Warning.

Information

For more information on instrument cluster settings, refer to the "Cluster Display" section in chapter 4.

Leading Vehicle Departure Alert function



When a detected vehicle in front departs from a stop, Leading Vehicle Departure Alert will inform the driver by displaying the **"Leading vehicle is driving away"** message on the instrument cluster and an audible warning will sound.

WARNING

- If any other system's warning message is displayed or audible warning is generated, Leading Vehicle Departure Alert's warning message may not be displayed and audible warning may not be generated.
- The driver has the responsibility to safely drive and control the vehicle.

CAUTION

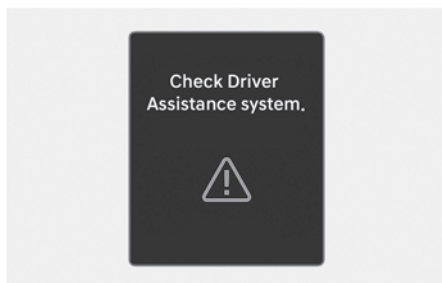
- Leading Vehicle Departure Alert is a supplemental function and may not alert the driver whenever the front vehicle departs from a stop.
- Always check the front of the vehicle and road conditions before departure.

i Information

The images and colors in the instrument cluster may differ depending on the cluster type or theme selected in the infotainment system.

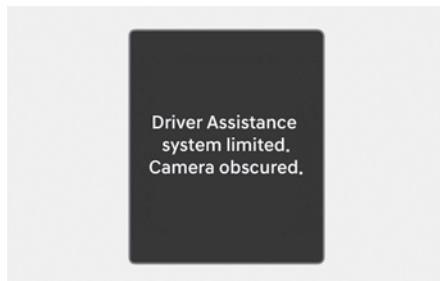
Driver Attention Warning Malfunction and Limitations

Driver Attention Warning malfunction



When Driver Attention Warning is not working properly, the "**Check Driver Assistance system.**" warning message will appear on the cluster for several seconds, and the master (⚠) warning light and the inattentive driving (🚦) warning light will appear on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

Driver Attention Warning disabled



When the front windshield where the front view camera is located is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Driver Attention Warning.

If this occurs, the "**Driver Assistance system limited. Camera obscured.**" warning message, the master (⚠) warning light, and the inattentive driving (🚦) warning light will appear on the instrument cluster.

Driver Attention Warning will operate properly when snow, rain or foreign material is removed. If Driver Attention Warning does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

- Driver Attention Warning may not properly operate in an area (for example, open terrain) where any objects are not detected right after turning ON the vehicle.

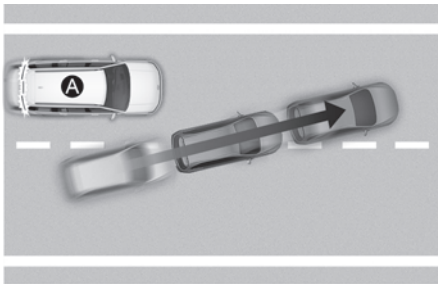
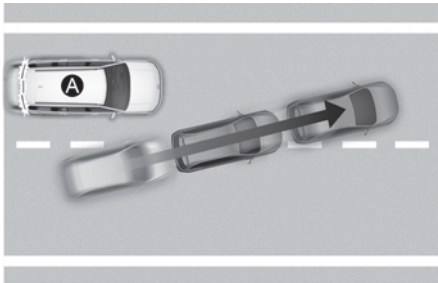
Limitations of Driver Attention Warning

Driver Attention Warning may not work properly in the following situations:

- The vehicle is driven violently
- The vehicle intentionally crosses over lanes frequently
- The vehicle is controlled by Driver Assistance system, such as Lane Keeping Assist
- Lanes are blurred or erased

Leading Vehicle Departure Alert function

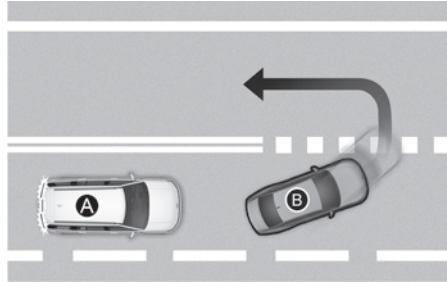
- **When the vehicle cuts in**



[A] Your vehicle
[B] Front vehicle

If a vehicle cuts in front of your vehicle, Leading Departure Alert may not operate properly.

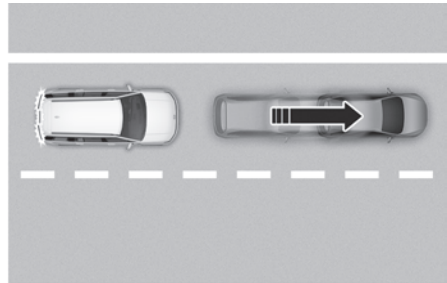
- **When the vehicle ahead sharply steers**



[A] Your vehicle
[B] Front vehicle

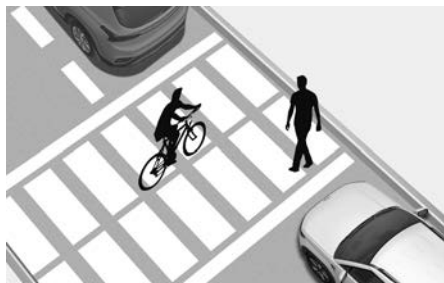
If the vehicle in front makes a sharp turn, such as to turn left or right or make a U- turn, etc., Leading Vehicle Departure Alert may not operate properly.

- **When the vehicle ahead abruptly departs**



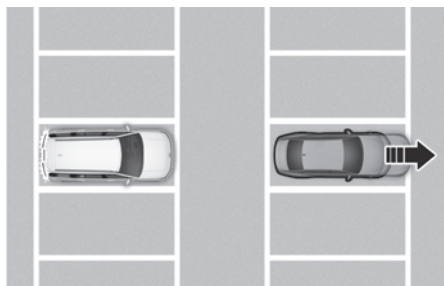
If the vehicle in front abruptly departs, Leading Vehicle Departure Alert may not operate properly.

- When a pedestrian or bicycle is between you and the vehicle ahead



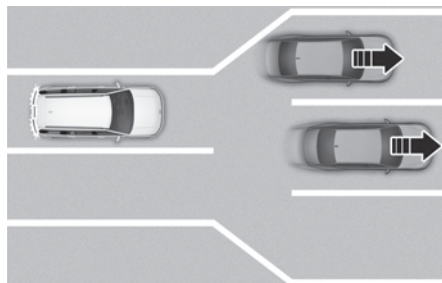
If there is a pedestrian(s) or bicycle(s) in between you and the vehicle in front, Leading Vehicle Departure Alert may not operate properly.

- When in a parking lot



If a vehicle parked in front drives away from you, Leading Vehicle Departure Alert may alert you that the parked vehicle is driving away.

- When driving at a tollbooth or intersection, etc.



If you pass a tollbooth or intersection with lots of vehicles or you drive where lanes are merged or divided frequently, Leading Vehicle Departure Alert may not operate properly.

WARNING

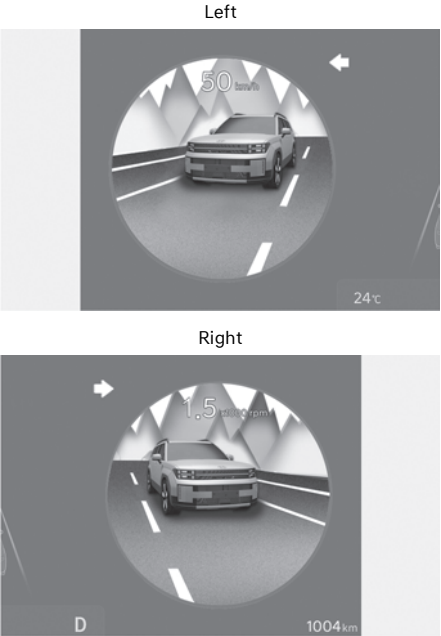
Driver Attention Warning may not operate for about 15 seconds after the vehicle is started, or the front view camera is initialized.

Information

For more information on the precautions of the front view camera, refer to the "Forward Collision-Avoidance Assist (FCA)" section in this chapter.

Blind-spot View Monitor (BVM)

 If equipped



Blind-Spot View Monitor uses the wide-side view cameras to display the rear blind spot areas of your vehicle on the instrument cluster when the turn signal is turned on to help with safe lane changes.

Information

Blind-Spot View Monitor uses the following sensor:

- Wide-side view cameras (camera located at bottom of the mirror)

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Blind-Spot View Monitor Settings

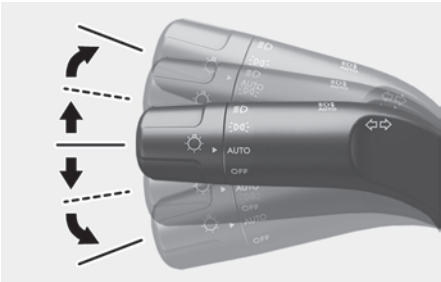
Setting features

Blind-Spot View

With the engine on, select **Setup** > **Vehicle** > **Driver Assistance** > **Driving Safety** and then enable **Blind-Spot View Monitor** in the infotainment system to turn on the Blind-Spot View Monitor feature.

Blind-Spot View Monitor Operation

Operating switch



Turn signal switch

Blind-Spot View Monitor will turn on and off when the turn signal is turned on and off.

Blind-Spot View Monitor

Operating conditions

When the left or right side turn signal turns on, the image in that direction is displayed on the instrument cluster.

Off conditions

- When the turn signal turns off, the image on the instrument cluster will turn off.
- When the hazard warning flasher is on, Blind-Spot View Monitor will turn off, regardless of the turn signal status.
- When other important warning is displayed on the instrument cluster, Blind-Spot View Monitor may turn off.

Blind-Spot View Monitor Malfunction

When Blind-Spot View Monitor is not working properly, or the cluster display flickers, or the camera image does not display properly, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

- The image shown on the instrument cluster may differ from the actual distance of the object. Make sure to directly check the vehicle's surroundings for safety.
- Always keep the camera lens clean. If the lens is covered with foreign material, it may adversely affect camera performance and Blind-Spot View Monitor may not operate properly.

Smart Cruise Control (SCC)

Smart Cruise Control detects a vehicle ahead and helps maintain the distance from the vehicle ahead and the set speed.

Overtaking Acceleration Assist

When Smart Cruise Control judges you are attempting to overtake a vehicle in front, Smart Cruise Control help with accelerating.

Based on Driving Style

 if equipped

Smart Cruise Control will operate based on the driver's driving style, such as inter-vehicle distance, acceleration, reaction speed.

Information

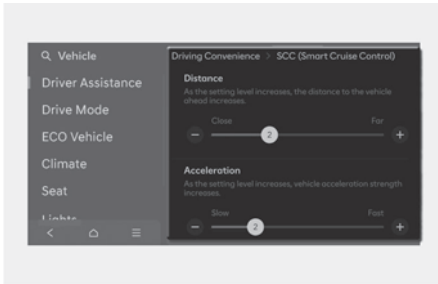
Smart Cruise Control uses the following sensors:

- Front view camera
- Front radar
- Front corner radar (if equipped)

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Smart Cruise Control Settings

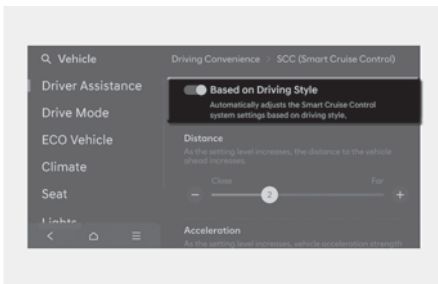
Smart Cruise Control



With the engine on, select **Setup > Vehicle > Driver Assistance > Driving Convenience > Smart Cruise Control** from the Settings menu in the infotainment system, you can change the vehicle distance, the acceleration, and the reaction speed manually.

Based on Driving Style

 if equipped



Smart Cruise Control operates based on your driving style, such as vehicle distance, acceleration, and reaction speed.

With the engine on, select **Setup > Vehicle > Driver Assistance > Driving Convenience > Smart Cruise Control > Based on Driving Style** from the Settings menu in the infotainment system.

Information

- If the **Based on Driving Style** is supported, you can select it from the **Vehicle > Driver Assistance > Driving Convenience > Smart Cruise Control**.
- Based on driving style setting continuously learns when the driver drives the vehicle.
- When Based on driving style is deactivated, the driver's driving style such as vehicle distance, acceleration, reaction speed will maintain in the same stage.

Information

You can set the following Warning Methods:

- Warning Volume/Haptic
Warning/Driving Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

Smart Cruise Control Operation

Operating conditions

Basic function

Smart Cruise Control operates when the following conditions are satisfied.

- The gear is in D (Drive)
- Your vehicle speed is within the operating speed range
 - 10-180 km/h (5-110 mph): when there is no vehicle in front
 - 0-180 km/h (0-110 mph): when there is a vehicle in front
- ESC (Electronic Stability Control) or ABS (Anti-Lock Braking System) is on

Smart Cruise Control does not operate in the following conditions.

- Your vehicle is in power down mode (Ⓢ indicator on)
- The driver's door is opened
- EPB (Electronic Parking Brake) is applied
- ESC (Electronic Stability Control) or ABS (Anti-Lock Braking System) is controlling the vehicle
- Forward Collision-Avoidance Assist brake control is operating
- Remote Smart Parking Assist brake control is operating (if equipped)
- Hands-off warning for Lane Keeping Assist and Highway Driving Assist is on

i Information

When stopped behind another vehicle, the driver can turn on Smart Cruise Control while the brake pedal is depressed.

Operating conditions for Acceleration Assist

Overtaking Acceleration Assist operates when the turn signal indicator is turned on to the left while Smart Cruise Control is operating, and the following conditions are satisfied:

- Your vehicle speed is above 60 km/h (40 mph)
- A vehicle is detected in front of your vehicle

Overtaking Acceleration Assist does not operate in the following conditions.

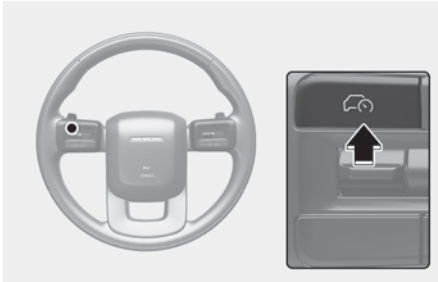
- The hazard warning flasher is on
- Vehicle speed is reduced to maintain distance with the vehicle in front



WARNING

- When the turn signal indicator is turned on to the left while there is a vehicle ahead, the vehicle may accelerate temporarily. Pay attention to the road conditions at all times.

Turning on Smart Cruise Control

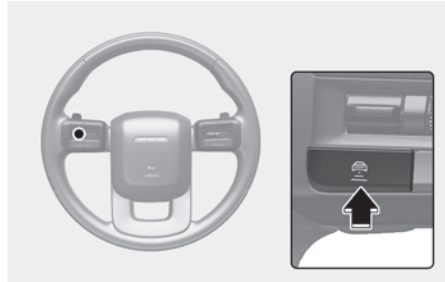


- Press the Driving Assist button to turn on Smart Cruise Control. The speed will be set to the current speed on the instrument cluster.
- If there is no vehicle in front of you, the set speed will be maintained, but if there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead. If the vehicle ahead accelerates, your vehicle will travel at a steady cruising speed after accelerating to the set speed.

i Information

If your vehicle speed is between 0-30 km/h (0-20 mph) when you press the Driving Assist button, Smart Cruise Control speed will be set to 30 km/h (20 mph).

Setting vehicle distance



Press the button repeatedly to cycle through the headway settings from **Distance 4** → **Distance 3** → **Distance 2** → **Distance 1** → **Distance 4**.

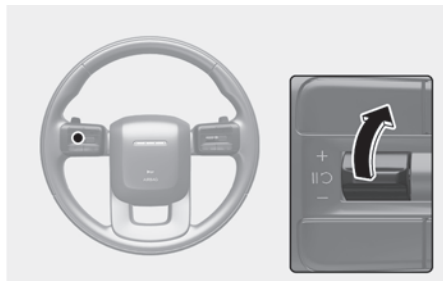
If you drive at 90 km/h (56 mph), the distance is maintained as follows:

- Distance 4: about 52.5 m (172 ft.)
- Distance 3: about 40 m (130 ft.)
- Distance 2: about 30 m (106 ft.)
- Distance 1: about 25 m (82 ft.)

i Information

The distance is set to the last set distance when the vehicle is restarted, or when Smart Cruise Control was temporarily canceled.

Increasing set speed

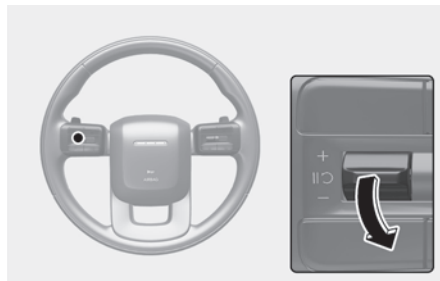


- Push the + switch up and release it immediately. The set speed will increase by 1 km/h (1 mph) each time the switch is operated in this manner.
- Push the + switch up and hold it while monitoring the set speed on the instrument cluster. The set speed will increase by 10 km/h (5 mph) each time the switch is operated in this manner. Release the switch when the desired speed is shown, and the vehicle will accelerate to that speed. You can increase the set speed to 180 km/h (110 mph).

WARNING

Check the driving condition before using the + switch. Driving speed may sharply increase when you push up and hold the + switch.

Decreasing set speed

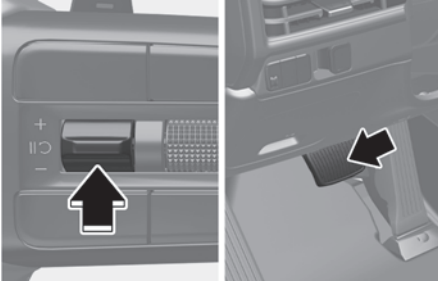


- Push the - switch down and release it immediately. The set speed will decrease by 1 km/h (1 mph) each time the switch is operated in this manner.
- Push the - switch down and hold it while monitoring the set speed on the cluster. The set speed will decrease by 10 km/h (5 mph) each time the switch is operated in this manner. Release the switch at the speed you want to maintain. You can decrease the set speed to 30 km/h (20 mph).

Information

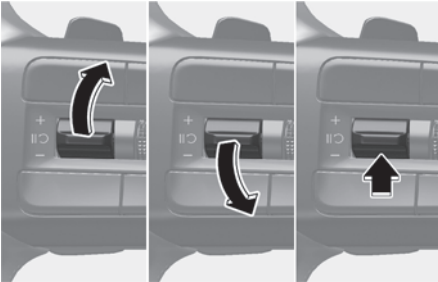
The driving speed may not reach the set speed depending on the vehicle characteristics and driving conditions.

Temporarily canceling Smart Cruise Control



Press the II switch or depress the brake pedal to temporarily cancel Smart Cruise Control.

Resuming Smart Cruise Control



To resume Smart Cruise Control after the function was canceled, operate the +, - or II switch.

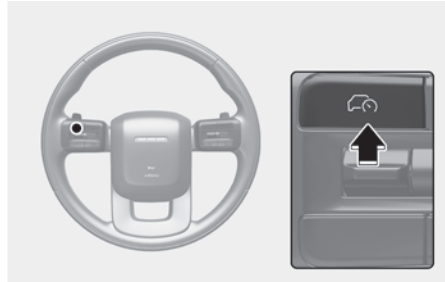
If you push the + switch up or - switch down, vehicle speed will be set to the current speed on the instrument cluster.

If you press the II switch, vehicle speed will resume to the preset speed.

WARNING

Check the driving condition before using the II switch. Driving speed may sharply increase or decrease when you press the II switch.

Turning off Smart Cruise Control



To turn Smart Cruise Control off, press the Driving Assist button.

Information

If your vehicle is equipped with Manual Speed Limit Assist, press and hold the Driving Assist button to turn off Smart Cruise Control. However Manual Speed Limit Assist will turn on.

WARNING

Do not use the switches and buttons at the same time. Smart Cruise Control may not operate properly.

Display and Control

Basic function

You can see the status of the Smart Cruise Control operation in the Driving Assist view on the instrument cluster. For more information, refer to the "View modes" section in chapter 4.

Smart Cruise Control will be displayed as below depending on the status of the function.

Operating



Temporarily cancelled



- When operating
 - (1) Whether there is a vehicle ahead and the selected distance level
 - (2) Set speed
 - (3) Whether there is a vehicle ahead and the target vehicle distance
- When temporarily cancelled
 - (1) Your vehicle (gray)
 - (2) Previous set speed (gray)
 - (3) Whether there is a vehicle ahead (gray) (if equipped)

i Information

- The distance of the front vehicle on the instrument cluster is displayed based on the actual distance between your vehicle and the vehicle ahead.
- The target distance may vary according to the vehicle speed and the set distance level. If the vehicle speed is low, even though the vehicle distance have changed, the change of the target vehicle distance may be small.
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected in the infotainment system.

Accelerating temporarily



If you want to speed up temporarily without altering the set speed while Smart Cruise Control is operating, depress the accelerator pedal. While the accelerator pedal is depressed, the set speed, distance level and target distance will blink on the instrument cluster.

However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.

WARNING

Be careful when accelerating temporarily, because the speed and distance is not controlled automatically even if there is a vehicle in front of you.

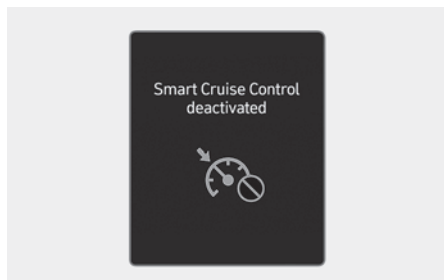
Based on Driving Style operation

 If equipped



When Based on driving style is operating, the vehicle distance level and target distance will be displayed white based on the driving style.

Temporarily canceling Smart Cruise Control



- The vehicle speed is above 190 km/h (120 mph)
- The vehicle is stopped for a certain period of time
- The accelerator pedal is continuously depressed for a certain period of time
- The conditions for the Smart Cruise Control to operate is not satisfied

If Smart Cruise Control is temporarily canceled automatically, the "**Smart Cruise Control deactivated**" warning message will appear on the instrument cluster, and an audible warning will sound to warn the driver.

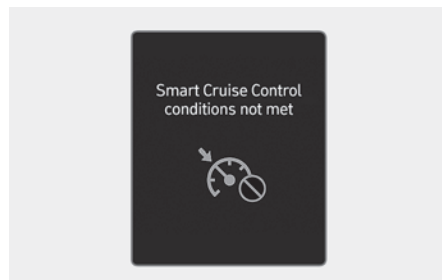
i Information

If Smart Cruise Control is temporarily canceled while the vehicle is at a standstill with the function activated, EPB (Electronic Parking Brake) maybe applied.

WARNING

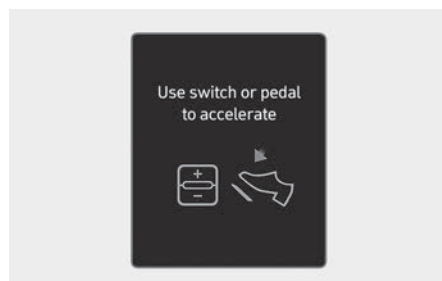
When Smart Cruise Control is temporarily canceled, distance with the front vehicle will not be maintained. Always have your eyes on the road while driving, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

Smart Cruise Control conditions not satisfied



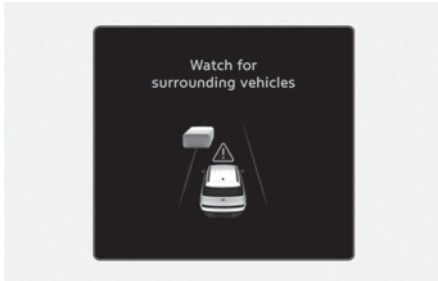
If the Driving Assist button, + switch, - switch or  switch is operated when Smart Cruise Control operating conditions are not satisfied, the "**Smart Cruise Ctrl. conditions not met**" will appear on the instrument cluster, and an audible warning will sound.

In traffic situation



In traffic, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving, your vehicle will start as well. In addition, after the vehicle has stopped and a certain time have passed, the "**Use switch or pedal to accelerate**" message will appear on the instrument cluster. Depress the accelerator pedal or operate the + switch, - switch or  switch to start driving.

Warning road conditions ahead



In the following situation, the **"Watch for surrounding vehicles"** warning message will appear on the instrument cluster, and an audible warning will sound to warn the driver of road conditions ahead.

- The vehicle in front disappears when Smart Cruise Control is maintaining the distance with the vehicle ahead while driving below a certain speed.

WARNING

Always pay attention to vehicles or objects that may suddenly appear in front of you, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

Collision Warning



While Smart Cruise Control is operating, when the collision risk with the vehicle ahead is high, the **"Collision Warning"** warning message will appear on the instrument cluster, an audible warning will sound and the steering wheel will vibrate to warn the driver. Always have your eyes on the road while driving, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

WARNING

In the following situations, Smart Cruise Control may not warn the driver of a collision.

- The distance from the front vehicle is near, or the vehicle speed of the front vehicle is faster or similar with your vehicle
- The speed of the front vehicle is very slow or is at a standstill
- The accelerator pedal is depressed right after Smart Cruise Control is turned on

WARNING

Take the following precautions when using Smart Cruise Control:

- Smart Cruise Control does not substitute for proper and safe driving. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.
- Smart Cruise Control may not recognize unexpected and sudden situations or complex driving situations, so always pay attention to driving conditions and control your vehicle speed.
- Keep Smart Cruise Control off when the function is not in use to avoid inadvertently setting a speed.
- Do not open the door or leave the vehicle when Smart Cruise Control is operating, even if the vehicle is stopped.
- Always be aware of the selected speed and headway distance.
- Keep a safe distance according to road conditions and vehicle speed. If the headway distance is too close during high-speed driving, a serious collision may result.
- When maintaining distance with the vehicle ahead, if the front vehicle disappears, Smart Cruise Control may suddenly accelerate to the set speed. Always be aware of unexpected and sudden situations from occurring.
- Vehicle speed may decrease on an upward slope and increase on a downward slope.
- Always be aware of situations such as when a vehicle cuts in suddenly.
- When you are towing a trailer or another vehicle, turn off Smart Cruise Control for safety reasons.
- Turn off Smart Cruise Control when your vehicle is being towed.
- Smart Cruise Control may not operate properly if interfered by strong electromagnetic waves.
- Smart Cruise Control may not detect an obstacle in front and lead to a collision. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.
- Vehicles moving in front of you with a frequent lane change may cause a delay in Smart Cruise Control reaction or may cause Smart Cruise Control to react to a vehicle actually in an adjacent lane. Always drive cautiously to prevent unexpected and sudden situations from occurring.
- Always be aware of the surroundings and drive safely, even though a warning message does not appear or an audible warning does not sound.
- If any other system's warning message is displayed or warning sound is generated, Smart Cruise Control warning message may not be displayed and warning sound may not be generated.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
- The vehicle manufacturer is not responsible for any traffic violation or crashes caused by the driver.
- Always set the vehicle speed under the speed limit in your area.

CAUTION

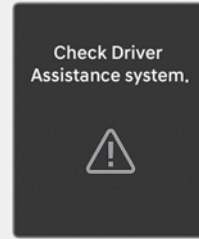
- The vehicle must be driven sufficiently to reflect the actual driving style of the driver, such as inter-vehicle distance, acceleration and reaction speed.
- If you are driving in special conditions, such as snow, rain, fog or steep slopes, the vehicle may not be driven according to the driver's driving style.

Information

- Smart Cruise Control may not operate for few seconds after the vehicle is started or the front view camera or front radar is initialized.
- You may hear a sound when the brake is controlled by Smart Cruise Control.

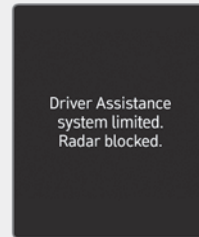
Smart Cruise Control Malfunction and Limitations

Smart Cruise Control malfunction



When Smart Cruise Control is not working properly, the "**Check Driver Assistance system.**" warning message will appear, and the "" warning light will illuminate on the instrument cluster. Have your vehicle inspected by an authorized HYUNDAI dealer.

Smart Cruise Control disabled



When the front radar cover or sensor is covered with snow, rain, or foreign material, it can reduce the detecting performance and temporarily limit or disable Smart Cruise Control.

If this occurs the **"Driver Assistance system limited. Radar blocked."** warning message will appear for a certain period of time on the instrument cluster.

Smart Cruise Control will operate properly when snow, rain or foreign material is removed.

WARNING

Even though the warning message does not appear on the instrument cluster, Smart Cruise Control may not properly operate.

CAUTION

Smart Cruise Control may not properly operate in an area (for example, open terrain), where there is nothing to detect after turning ON the vehicle.

Limitations of Smart Cruise Control

Smart Cruise Control may not operate properly, or it may operate unexpectedly under the following circumstances:

- The detecting sensor or the surroundings are contaminated or damaged
- Washer fluid is continuously sprayed, or the wiper is on
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming vehicle is reflected on the wet road surface, such as a puddle on the road
- The temperature around the front view camera is high or low
- An object is placed on the dashboard
- The surrounding is very bright
- The surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlights are not on or are not bright
- Driving in heavy rain or snow, or thick fog
- Driving through steam, smoke or shadow
- Only part of the vehicle is detected
- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lights are not on or are not bright
- The rear of the front vehicle is small or does not look normal (for example, tilted, overturned, etc.)
- The front vehicle's ground clearance is low or high
- A vehicle suddenly cuts in front
- Your vehicle is being towed
- Driving through a tunnel or iron bridge
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.

- An object reflecting off the front radar such as a guardrail, nearby vehicle, etc.
- The bumper around the front radar is impacted, damaged or the front radar is out of position
- The temperature around the front radar is high or low
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- The vehicle in front is made of material that does not reflect on the front radar
- Driving near a highway interchange or tollbooth
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- Driving on a curved road
- The vehicle in front is detected late
- The vehicle in front is suddenly blocked by an obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed
- The vehicle in front is bent out of shape
- The front vehicle's speed is fast or slow
- With a vehicle in front, your vehicle changes lane at low speed
- The vehicle in front is covered with snow
- Unstable driving
- You are on a roundabout and the vehicle in front is not detected
- You are continuously driving in a circle
- Driving in a parking lot
- Driving through a construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
- Driving on an incline road, curved road, etc.
- Driving through a roadside with trees or streetlights
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Driving through a narrow road where trees or grass are overgrown
- There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise

- **Driving on a curved road**



On curves, Smart Cruise Control may not detect a vehicle in the same lane, and may accelerate to the set speed. Also, vehicle speed may rapidly decrease when the vehicle ahead is detected suddenly.

Select the appropriate set speed on curves and apply the brake pedal or accelerator pedal according to the road and driving conditions ahead.



Your vehicle speed can be reduced due to a vehicle in the adjacent lane.

Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the Smart Cruise Control.

- **Driving on an inclined road**



During uphill or downhill driving, the Smart Cruise Control may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, vehicle speed will rapidly decrease when the vehicle ahead is detected suddenly.

Select the appropriate set speed on inclines and apply the brake pedal or accelerator pedal according to the road and driving conditions ahead.

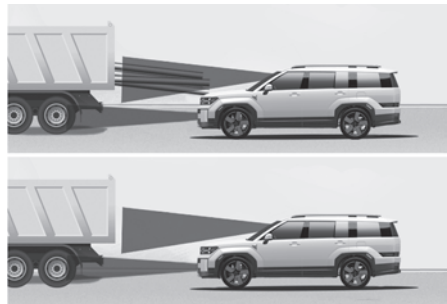
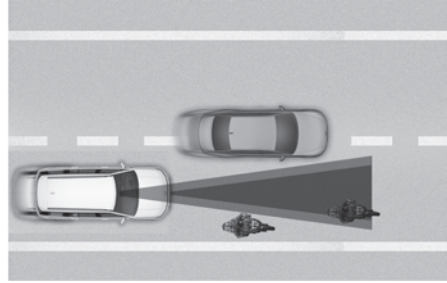
• Changing lanes



[A] Your vehicle
[B] Lane changing vehicle

When a vehicle moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Smart Cruise Control may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

• Situations when detecting are limited

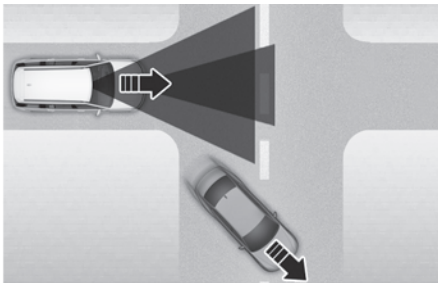


In the following cases, some vehicles, pedestrians or animals in your lane cannot be detected by the sensor:

- Vehicles offset to one side
- Slow-moving vehicles or sudden decelerating vehicles
- Vehicles with higher ground clearance or vehicles carrying loads that stick out of the back of the vehicle
- Vehicles that has the front lifted due to heavy loads
- Vehicles within about 2 m (6 ft.) from your vehicle
- Oncoming vehicles
- Stopped vehicles

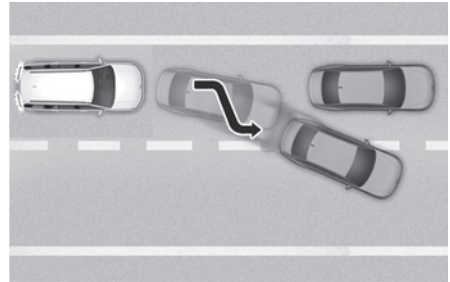
- Vehicles with small rear profile, such as trailers
- Narrow vehicles, such as motorcycles or bicycles
- Special vehicles
- Animals and pedestrians
- Adjust your vehicle speed by depressing the brake pedal according to the road and driving conditions ahead.
- In the following cases, the vehicle in front cannot be detected by the sensor:
 - You are steering your vehicle
 - Driving on narrow or sharply curved roads
- When a vehicle ahead disappears at an intersection, your vehicle may accelerate.

Always pay attention to road and driving conditions while driving.

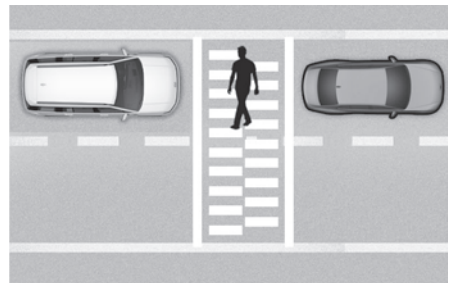


- When a vehicle in front of you merges out of the lane, Smart Cruise Control may not immediately detect the new vehicle that is now in front of you.

Always pay attention to road and driving conditions while driving.



- Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.



Navigation-based Smart Cruise Control (NSCC)

 If equipped

Navigation-based Smart Cruise Control can help drive at a certain speed according to the road conditions when driving on highways by using road information from the navigation system while Smart Cruise Control is operating.

Information

- Navigation-based Smart Cruise Control is available only on controlled access roads.
 - Controlled access roads are roads with limited entrances and exits that allow uninterrupted high speed traffic flow.

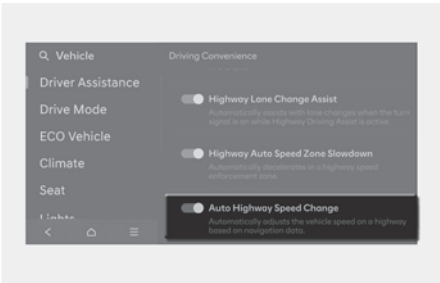
Available highway (Controlled access road)	
USA	Select Interstate Highway and U.S. (Federal) and State Highways
Canada	Select Provincial and Territorial Highways

- Additional highways may be available in future navigation system updates.
- Navigation-based Smart Cruise Control does not operate on interchanges or junctions.

Highway Auto Curve Slowdown

If vehicle speed is high, Highway Auto Curve Slowdown function will temporarily decelerate your vehicle or limit acceleration to help you drive safely on a curve based on the curve information from the navigation.

Navigation-based Smart Cruise Control Settings



With the engine on, select **Setup > Vehicle > Driver Assistance > Driving Convenience > Highway Auto Speed Change** from the infotainment system to turn on Navigation based Smart Cruise Control and deselect to turn off the function.

Information

When there is a problem with Navigation-based Smart Cruise Control, the function cannot be set in the infotainment system.

Navigation-based Smart Cruise Control Operation

Operating conditions

Navigation-based Smart Cruise Control is ready to operate if all of the following conditions are satisfied:

- Select "**Highway Auto Speed Change**" from the infotainment system.
- Smart Cruise Control is operating
- Driving on main roads of highways

i Information

For more information on how to operate Smart Cruise Control, refer to the "Smart Cruise Control (SCC)" section in this chapter.

Navigation-based Smart Cruise Control display and control

When Navigation-based Smart Cruise Control operates, it will be displayed on the instrument cluster as follows:



Navigation-based Smart Cruise Control standby

If the operating conditions are satisfied, the green **NAV** indicator light illuminates.

Navigation-based Smart Cruise Control operating

While the speed is being controlled, the green **NAV** indicator light blinks.

Temporarily canceled or interrupted by the driver

If Navigation-based Smart Cruise Control cannot control the vehicle, such as when Smart Cruise Control is temporarily canceled or the navigation system is searching for a route, the gray **NAV** indicator light illuminates.

When the driver depresses the accelerator pedal, the white **NAV** indicator light blinks.

WARNING



"**Drive carefully**" warning message will appear in the following circumstances:

- Navigation-based Smart Cruise Control is not able to slow down your vehicle to a safe speed

i Information

The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the infotainment system.

Highway Curve Zone Auto Slowdown

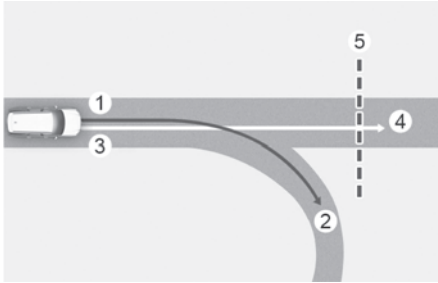
- Depending on the curve ahead on the highway, the vehicle will decelerate, and after passing the curve, the vehicle will accelerate to Smart Cruise Control set speed.
- Vehicle deceleration time may differ depending on the vehicle speed and the degree of the curve on the road. The higher the driving speed, deceleration will start faster.

Limitations of Navigation-based Smart Cruise Control

Navigation-based Smart Cruise Control may not operate properly under the following circumstances:

- The navigation is not working properly
- Map information is not transmitted due to infotainment system's abnormal operation
- Speed limit and road information in the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- The navigation searches for a route while driving
- GPS signals are blocked in areas such as a tunnel
- A road that divides into two or more roads and joins again
- The driver goes off course from the route set in the navigation
- The route to the destination is changed or cancelled by resetting the navigation
- The vehicle enters a service station or rest area
- Android Auto or Car Play is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads including overpass adjacent to general roads or nearby roads exist in a parallel way)
- The navigation is being updated while driving
- The navigation is being restarted while driving
- The speed limit of some sections changes according to the road situations
- Driving on a road under construction
- Driving in lane-restricted driving situations

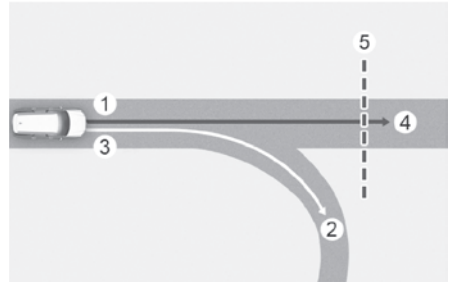
- There is bad weather, such as heavy rain, heavy snow, etc.
- Driving on a road that is sharply curved



- (1) Set route
- (2) Branch line
- (3) Driving route
- (4) Main road
- (5) Curved road section

- When there is a difference between the navigation set route (branch line) and the driving route (main road), Highway Curve Zone Auto Slowdown function may not operate until the driving route is recognized as the main road.

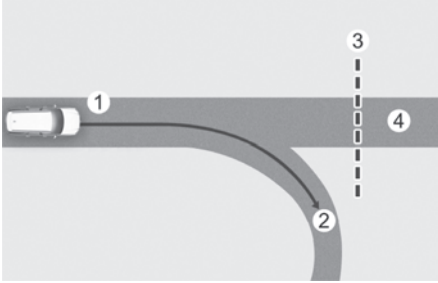
- When the vehicle's driving route is recognized as the main road by maintaining the main road instead of the navigation set route, Highway Curve Zone Auto Slowdown function will operate. Depending on the distance to the curve and the current vehicle speed, vehicle deceleration may not be sufficient or may decelerate rapidly.



- (1) Set route
- (2) Branch line
- (3) Driving route
- (4) Main road
- (5) Curved road section

- When there is a difference between the navigation route (main road) and the driving route (branch line), Highway Curve Zone Auto Slowdown function will operate based on the curve information on the main road.

- When it is judged that you are driving out of the route by entering the highway interchange or junction, Highway Curve Zone Auto Slowdown function will not operate.



- (1) Driving route
- (2) Branch line
- (3) Curved road section
- (4) Main road

- If there is no destination set on the navigation, Highway Curve Zone Auto Slowdown function will operate based on the curve information on the main road.
- Even if you depart from the main road, Highway Curve Zone Auto Slowdown function may temporarily operate due to navigation information of the highway curve section.

WARNING

- Navigation-based Smart Cruise Control is not a substitute for safe driving practices, but a convenience function. Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws.
- The navigation's speed limit information may differ from the actual speed limit information on the road. It is the driver's responsibility to check the speed limit on the actual driving road or lane.
- Navigation-based Smart Cruise Control will automatically be canceled when you leave the highway main road. Always pay attention to road and driving conditions while driving.
- Navigation-based Smart Cruise Control may not operate due to the existence of leading vehicles and the driving conditions of the vehicle. Always pay attention to road and driving conditions while driving.
- When you are towing a trailer or another vehicle, turn off Navigation-based Smart Cruise Control for safety reasons.
- After you pass through a tollbooth on a highway, Navigation-based Smart Cruise Control will operate based on the first lane. If you enter one of the other lanes, Navigation-based Smart Cruise Control might not operate properly.

- The vehicle will accelerate if the driver depresses the accelerator pedal while Navigation-based Smart Cruise Control is operating, and the function will not decelerate the vehicle. However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.
- If the driver accelerates and releases the accelerator pedal while Navigation-based Smart Cruise Control is operating, the vehicle may not decelerate sufficiently or may rapidly decelerate to a safe speed.
- If the curve is too large or too small, Navigation-based Smart Cruise Control may not operate.

i Information

- A time gap could occur between the navigation's guidance and when Navigation-based Smart Cruise Control operation starts and ends.
- The speed information on the instrument cluster and navigation may differ.
- Even if you are driving at a speed lower than Smart Cruise Control set speed, acceleration may be limited by the curve sections ahead.
- If Navigation-based Smart Cruise Control is operating while leaving the main road to enter an interchange, junction, rest area, etc., the function may operate for a certain period of time.
- Deceleration by Navigation-based Smart Cruise Control may feel it is not sufficient due to road conditions such as uneven road surfaces, narrow lanes, etc.

Lane Following Assist (LFA)

Lane Following Assist helps detect lane markings and/or a vehicle ahead on the road, and helps center your vehicle in the lane.

i Information

Lane Following Assist uses the following sensor:

- Front view camera

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Lane Following Assist Settings

CAUTION

When the trailer's connector is plugged into your vehicle, Lane Following Assist automatically turns off. In this case, you cannot get help from Lane Following Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

i Information

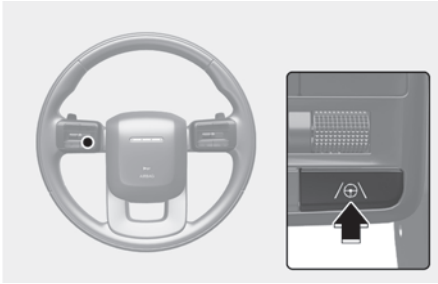
You can set the following Warning Methods:

- Warning Volume/Driving Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

Lane Following Assist Operation

Turning Lane Following Assist On/Off



With the engine on, shortly press the Lane Driving Assist button located on the steering wheel to turn on Lane Following Assist. The gray or green (Ⓢ) indicator light will illuminate on the instrument cluster.

Press the button again to turn off the function.

Lane Following Assist

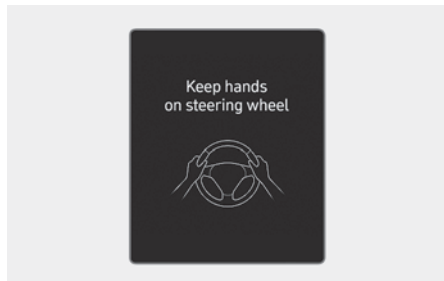


If the vehicle ahead and/or both lane markings are detected and your vehicle speed is below 180 km/h (110 mph), the green (Ⓢ) indicator light appears on the cluster, and Lane Following Assist helps center the vehicle in the lane by assisting the steering wheel.

CAUTION

When the steering wheel is not assisted, the white (Ⓢ) indicator light blinks and changes to gray.

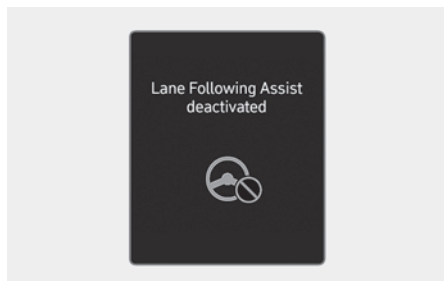
Hands-off warning



If the driver takes their hands off the steering wheel for several seconds, the **"Keep hands on steering wheel"** warning message will appear and an audible warning will sound in stages.

First stage: Warning message

Second stage: Warning message (red steering wheel) with a warning sound



If the driver still does not have their hands on the steering wheel after the hands-off warning, the **"Lane Following Assist deactivated"** warning message will appear and Lane Following Assist will be automatically canceled.

WARNING

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Following Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If the steering wheel is held very lightly the hands-off warning message may appear because Lane Following Assist may not recognize that the driver has their hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

i Information

- For more information on instrument cluster settings, refer to the "Cluster display control" section in chapter 4.
- When both lane markings are detected, the lane lines on the instrument cluster will change from gray to white.

Lane undetected



Lane detected

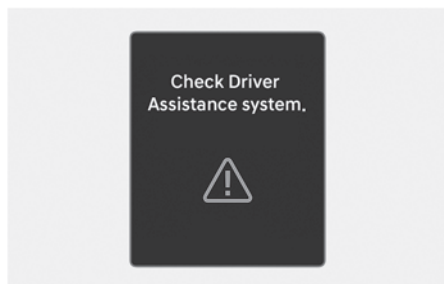


- If lane markings are not detected, steering wheel control by Lane Following Assist can be limited depending on whether a vehicle is in front or the driving conditions of the vehicle.
 - Even though the steering is assisted by Lane Following Assist, the driver may control the steering wheel.
 - The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Following Assist than when it is not.
-

- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected in the infotainment system.

Lane Following Assist Malfunction and Limitations

Lane Following Assist malfunction



When Lane Following Assist is not working properly, the "**Check Driver Assistance system.**" warning message will appear on the instrument cluster for several seconds, and the master (⚠) warning light appears on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

Limitations of Lane Following Assist

For more information on Lane Following Assist limitations, refer to the "Lane Keeping Assist (LKA)" section in this chapter.

WARNING

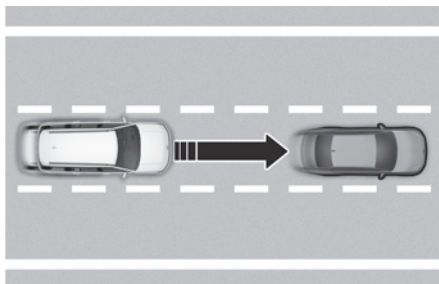
Loading in excess of the maximum load allowance or concentrated loading at one point in the cargo compartment can reduce the vehicle's driving stability, which can in turn reduce the effectiveness of Lane Following Assist.

Highway Driving Assist (HDA)

 if equipped

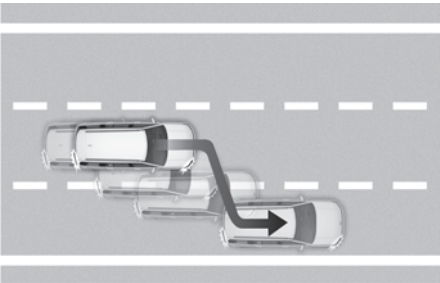
Highway Driving Assist

Highway Driving Assist helps maintain a set distance and speed from the vehicle ahead while driving on a highway main section and helps center the vehicle in the lane.



Highway Lane Change Assist

 if equipped



Highway Lane Change Assist function helps change lanes to the direction the driver slightly moves the turn signal switch if the function judges that lane change is possible.

i Information

- Highway Driving Assist is available only on controlled access roads.
 - Controlled access roads are roads with limited entrances and exits that allow uninterrupted high speed traffic flow.

Available highway
(Controlled access road)

USA	Select Interstate Highway and U.S. (Federal) and State Highways
Canada	Select Provincial and Territorial Highways

- Additional highways may be available in future navigation system updates.
- Highway Driving Assist does not operate on interchanges or junctions.

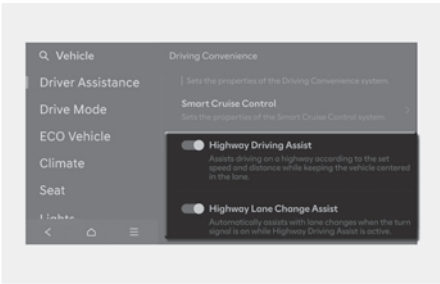
i Information

Highway Driving Assist uses the following sensors:

- Front view camera
- Front radar
- Front corner radar (if equipped)
- Rear corner radar (if equipped)

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Highway Driving Assist settings



With the engine on, select or deselect **Setup > Vehicle > Driver Assistance > Driving Convenience > Highway Driving Assist** from the infotainment system to set whether to use each function.

Basic function

If **Highway Driving Assist** is selected, it helps maintain distance from the vehicle ahead, maintain the set speed, and helps center the vehicle in the lane.

Highway Lane Change Assist

 if equipped

If **Highway Lane Change Assist** is selected, it helps the driver change lanes.

Information

- When **Highway Driving Assist** is deselected, the setting for Highway Lane Change Assist cannot be changed.
- If there is a problem with the functions, the settings cannot be changed. Have the vehicle inspected by an authorized HYUNDAI dealer.
- If the vehicle is restarted, the functions will maintain the last setting.

Information

For your safety, only change the settings after parking the vehicle at a safe location.

CAUTION

When the trailer's connector is plugged into your vehicle, Highway Driving Assist automatically turns off. In this case, you cannot get help Highway Driving Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

Information

You can set the following Warning Methods:

- Warning Volume/Driving Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

Highway Driving Assist Operation

Basic function

Displaying operating status

You can see the status of the Highway Driving Assist operation in the Driving Assist view on the instrument cluster. For more information, refer to the "View modes" section in chapter 4.

Highway Driving Assist will be displayed as below depending on the status of the function.

Operating state



Standby state



1. Highway Driving Assist indicator, whether there is a vehicle ahead and the selected distance level are displayed.
 - Highway Driving Assist indicator (HDA)
 - Green HDA: Operating state
 - Gray HDA: Standby state
 - White HDA blink: Accelerator depressed state
 - Not displayed : Off
2. Set speed
3. Lane Following Assist indicator
4. Whether there is a vehicle ahead and the selected headway
5. Whether the lane is detected or not

i Information

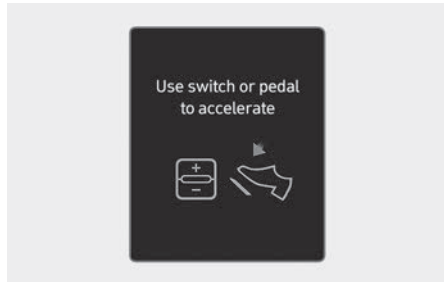
- For more information on the display refer to the "Smart Cruise Control (SCC)" and "Lane Following Assist (LFA)" sections in this chapter.
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from infotainment system.

Highway Driving Assist operation

Highway Driving Assist operates when:

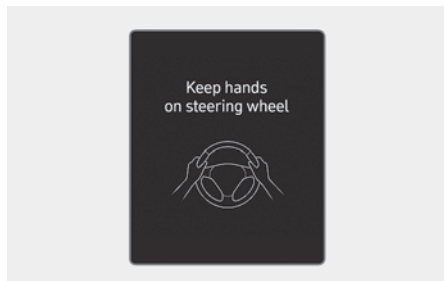
- Driving on the main road of highways, and turning on Highway Driving Assist by pressing the Driving Assist button
- Entering the main road of highways while Lane Following assist and Smart Cruise Control are operating

Restarting after stopping



When Highway Driving Assist is operating, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving within 30 seconds after the stop, your vehicle will start as well. In addition, after the vehicle has stopped and 30 seconds have passed, the "**Use switch or pedal to accelerate**" message will appear on the instrument cluster. Depress the accelerator pedal or operate the + switch, - switch or  switch to start driving.

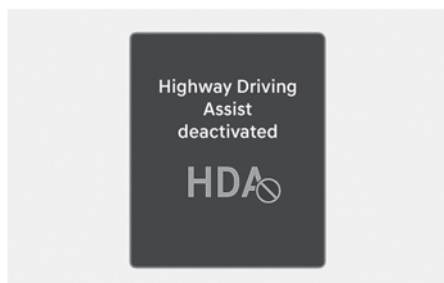
Hands-off warning



If the driver takes their hands off the steering wheel for several seconds, the **"Keep hands on steering wheel"** warning message will appear and an audible warning will sound in stages.

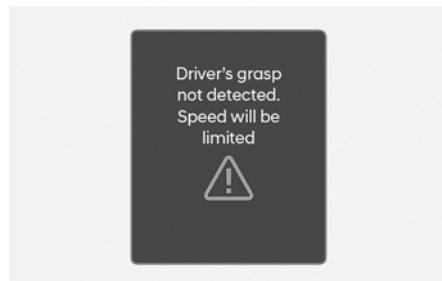
First stage: Warning message

Second stage: Warning message (red steering wheel) and audible warning



If the driver still does not have their hands on the steering wheel after the hands-off warning, **"Highway Driving Assist deactivated"** warning message will appear and Highway Driving Assist will be automatically canceled.

Driving speed limit

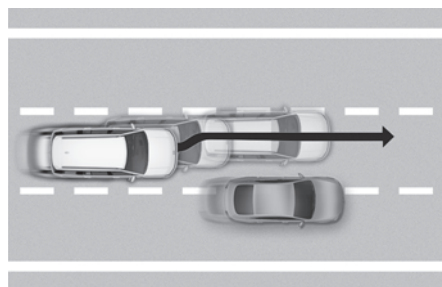


When Highway Driving Assist is canceled by the hands-off warning, The driving speed will be limited.

While Driving Speed Limit function is operating, the **"Driver's grasp not detected. Driving speed will be limited"** warning message will appear on the instrument cluster, and an audible warning will sound continuously.

Driving to one side within lane

 if equipped



When vehicle speed is above 60 km/h (40 mph), if a vehicle around you is driving at a close distance, your vehicle will control steering in the opposite direction of the vehicle to assist in safe driving.

If there are detected vehicles on both sides of the lane that are driving close to you, your vehicle does not control steering in either direction.

Highway Driving Assist standby

When the Smart Cruise Control is temporarily canceled while Highway Driving Assist is operating, Highway Driving Assist will be in the standby state. At this time, Lane Following Assist will operate properly.

i Information

- Driving Speed Limit helps you drive below 60 km/h (40 mph). At this time, the vehicle decelerates due to the vehicle ahead. After the vehicle has decelerated, it cannot automatically accelerate.
- Driving Speed Limit will cancel in the following circumstances:
 - When the driver grabs the steering wheel again
 - When the driver turns on Lane Following Assist by pressing the Lane Driving Assist button (/⊕\)
 - When +, -, II↻ switch or 🛑 button is operated, or the accelerator pedal or the brake pedal is depressed

Highway Lane Change Assist

If equipped

Displaying operating status

You can see the status of the Highway Lane Change Assist function operation in the Driving Assist view on the instrument cluster. For more information, refer to the "View modes" section in chapter 4.

Highway Lane Change Assist function will be displayed as below depending on the status of the function.

Ready/Operating



Standby/Canceled



1. Highway Lane Change Assist indicator

- Green  on : Ready state
- Green  blink : Operating state
- Grey  on : Standby state
- White  blink : Canceled state (display only a certain time)

2. Lane line

The lane line is displayed same as the Highway Lane Change Assist indicator (1). However, if the function is on standby, it displays whether the lane line is detected.

3. Green arrow and shade

The green arrow is displayed when a certain amount of time has passed after the function has started operating, and until the lane change has completed.

4. Message

- Message is displayed when the function does not operate even though the turn signal is used.
- Message is displayed when the function is canceled while operating.

To turn on Highway Lane Change Assist

Highway Lane Change Assist function will turn on when the following conditions are satisfied.

- The Driving Assist button or Lane Driving Assist button is used to turn on Highway Driving Assist.

Highway Lane Change Assist ready to operate

While Highway Lane Change Assist function is on, the function will be ready to operate when all the following conditions are satisfied:

- Highway Driving Assist is operating
- Lane Following Assist is operating
- A vehicle in the rear area of your vehicle is detected more than once after the vehicle is turned on
- Your vehicle speed is above 30 km/h (20 mph)
- When your vehicle is between 30-60 km/h (20-40 mph), a vehicle is detected in the rear area of your vehicle's left and right side lanes, and there is no risk of collision when changing a lane
- Hands-off warning is not displayed on the instrument cluster
- Hazard warning flasher is off

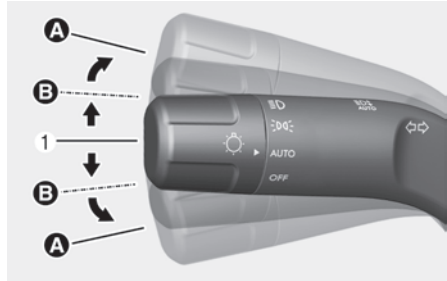
i Information

- While Lane Change Assist function is turned on (indicator on), Lane Following Assist will not cancel even if the turn signal indicator or hazard warning flasher is operating.
- Lane Change Assist function turns off automatically when driven in the following road conditions:
 - One driving lane
 - A road with no structure, such as a medium strip, guardrails, etc.
 - There is a pedestrian or cyclist on the road ahead
- When the function is in the ready state, and vehicle speed is below 25 km/h (15.5 mph), the function will change to the standby state.
- When your vehicle is between 30-60 km/h (20-40 mph), and a vehicle is not detected in the rear area of your vehicle's left and right side lanes, the function will change to the standby state.
- If there is a risk of collision, the function will change to the standby state.

⚠ WARNING

When Highway Lane Change Assist function turns off while operating, steering assist will be temporarily canceled. Always be cautious while driving.

Highway Lane Change Assist operation



(1) Center

Highway Lane Change Assist function will operate, when you push the turn signal lever up or down to the A or B position while the function is in the ready state (↔ indicator is green), and all of the following conditions are satisfied:

- The driver has his/her hand on the steering wheel
- There is no collision risk in the direction of lane change
- There is a single dotted lane line in the direction of lane change
- There are no Forward Collision-Avoidance Assist and Blind Spot Collision-Avoidance Assist warnings
- The vehicle is driven in the middle of the lane (should not be driving close to one side of the lane)
- The road you are driving on, or the road you are about to change lane is a road that the function can operate

i Information

- Highway Lane Change Assist operates when the turn signal lever is positioned at A. If the turn signal lever is released to the center (1) before stepping on the lane, Highway Lane Change Assist cancels. If the turn signal lever is released to the center (1) after stepping on the lane, Highway Lane Change Assist changes the lane and turns off the turn signal after lane change is complete.
- When the turn signal lever is placed at B position for a certain period of time, the green arrow will appear. At this time, even when the lever is released and returns to its original position (1), lane change will still be assisted.

While lane change is being made by the function, the turn signal indicator will blink even when the turn signal lever is not held, and the turn signal indicator will turn off when lane change is complete.

Highway Lane Change Assist standby

Highway Lane Change Assist function will be in the standby state when one of the ready state condition is not satisfied, or when entering or driving on one of the following roads:

- Road within a certain distance from the tollbooth on the main road of the highway
- The road ahead ends without an interchange or junction
- Road with sharp curves
- Road with narrow lanes

Highway Lane Change Assist cancel

The function will be canceled when:

- The turn signal lever is moved to the "A" position while the Highway Lane Change Assist function is operating and placed in the center (1) before stepping on the lane line
- The turn signal lever is turned on in the opposite direction of lane change
- The steering wheel is steered sharply



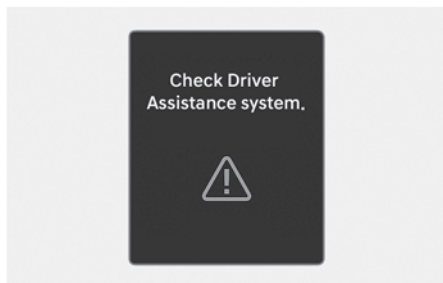
WARNING

- While Highway Driving Assist is operating, the function will cancel if one of the following occurs:
 - Highway Driving Assist is turned off
 - Lane Following Assist or Smart Cruise Control is turned off or temporarily canceled
 - Hands-off warning message is displayed on the instrument cluster
 - The hazard warning flasher is turned on
 - Forward Collision-Avoidance Assist or Blind-Spot Collision-Avoidance Assist warning message is displayed
 - Possible collision is detected in the next lane, even though there are no Forward Collision-Avoidance Assist and Blind-Spot Collision-Avoidance Assist warning
 - The target lane to make a lane change disappears
 - The target lane to make a lane change is not detected
 - There is a problem with turn signal lights
 - Highway Lane Change Assist function is off (The function turns off when the function is turned off from the settings menu, when the road changes to a one-way road, when there is a intersection or crosswalk ahead, when you enter a road with no structure, such as a medium strip, guardrail, etc., or when there is a pedestrian or cyclist on the driving lane.)
 - Your vehicle speed is below 25 km/h (15.5 mph)
 - When your vehicle is between 30-60 km/h (20-40 mph), and a vehicle is not detected in the rear area of your vehicle's left and right side lanes
 - If there is a risk of collision with a vehicle in the rear area of your vehicle
 - While the function is operating, when the function is canceled, depending on the driving conditions, the vehicle may drive to the middle of the driving lane or steering assist may stop. Always pay attention to road and driving conditions while driving.
 - The function may not operate properly on roads with pedestrians or cyclists, such as an intersection or crosswalk. Always pay attention to road and driving conditions while driving.
-

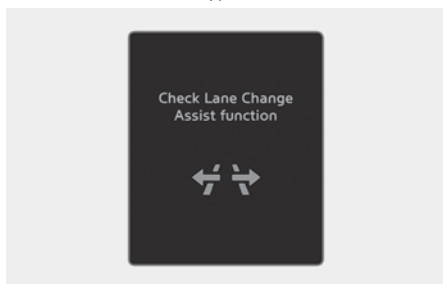
Highway Driving Assist Malfunction and Limitations

Highway Driving Assist malfunction

Type A



Type B



When Highway Driving Assist is not working properly, the "**Check Driver Assistance system.**" or "**Check Lane Change Assist function**" warning message and Master (⚠) warning light appears on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

WARNING

- The driver is responsible for controlling the vehicle and safe driving.
- Always have your hands on the steering wheel while driving.
- Highway Driving Assist is a supplemental function that assists the driver in driving the vehicle and is not a complete autonomous driving system. Always check road conditions, and if necessary, take appropriate actions to drive safely.
- Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws. The vehicle manufacturer is not responsible for any traffic violation or crashes caused by the driver.
- Highway Driving Assist may not be able to recognize all traffic situations. Highway Driving Assist may not detect possible collisions due to limitations of the function. Always be aware of the limitations of the function. Obstacles such as vehicles, motorcycles, bicycles, pedestrians, or unspecified objects or structures such as guardrails, tollbooth, etc., that may collide with the vehicle may not be detected.
- Highway Driving Assist will turn off automatically under the following situations:
 - Driving on roads that Highway Driving Assist does not operate, such as a rest area, intersection, junction, etc.
 - The navigation does not operate properly such as when the navigation is being updated or restarted

- Highway Driving Assist may inadvertently operate or turn off depending on road conditions (navigation information) and surroundings.
 - Lane Following Assist function may be temporarily disabled when the front view camera cannot detect lanes properly or the hands-off warning is on.
 - You may not hear the warning sound of Highway Driving Assist if the surrounding is noisy.
 - If the vehicle is driven at high speed above a certain speed at a curve, your vehicle may drive to one side or may depart from the driving lane.
 - When you are towing a trailer or another vehicle, turn off Highway Driving Assist for safety reasons.
 - The hands-off warning message may appear early or late depending on how the steering wheel is held or road conditions. Always have your hands on the steering wheel while driving.
 - For your safety, please read the owner's manual before using the Highway Driving Assist.
 - Highway Driving Assist will not operate when the vehicle is started, or when the detecting sensors or navigation is being initialized.
-

Limitation of Highway Driving Assist

Highway Driving Assist and Highway Lane Change function may not operate properly, or may not operate under the following circumstances:

- The map information and the actual road is different because the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- The infotainment system is overloaded by simultaneously performing functions such as route search, video playback, voice recognition, etc.
- GPS signals are blocked in areas such as a tunnel
- The driver goes off course or the route to the destination is changed or canceled by resetting the navigation
- The vehicle enters a service station or rest area
- Android Auto or Car Play is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads including overpass adjacent to general roads or nearby roads exist in a parallel way)
- White single dotted lane line or road edge cannot be detected
- The road is temporarily controlled due to construction, etc.
- There is no structure, such as a medium strip, guardrails, etc., on the road
- There is a changeable lane in the direction of lane change
- If a trailer, carrier, etc., is installed

***i* Information**

For more information on the limitations of the front view camera and front radar, refer to the "Forward Collision-Avoidance Assist (FCA)" section in this chapter.

Rear View Monitor (RVM)

 if equipped

Rear View Monitor displays the area behind your vehicle to help with safe parking.

Information

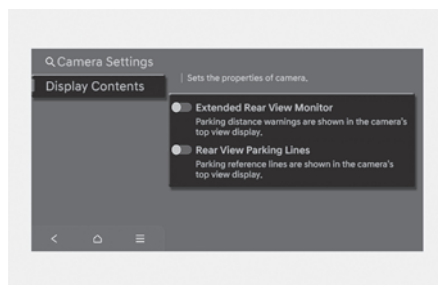
Rear View Monitor uses the following sensor:

- Wide-rear view camera

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Rear View Monitor settings

Camera settings



- You can change Rear View Monitor "**Display Contents**" by touching the setup icon (⚙️) on the screen while Rear View Monitor is operating, or by selecting **Setup > Display > Camera Settings > Display Contents** in the infotainment system while the vehicle is on.
- In the "**Display Contents**", you can change settings for **Extended Rear View Monitor** and **Rear View Parking Lines**.

Extend rear camera use

When the '**Extended Rear View Monitor**' is selected, parking Guide Lines is displayed in the rear view.

Rear view reference lines

If **Rear View Parking Lines** is selected, the rear view parking guide lines and rear top view guide lines will be displayed at the rear view area of the infotainment system screen.

i Information

- The horizontal guide lines of the Rear View Parking Guidance shows the distance of 0.5 m (20 in.), 1 m (40 in.) and 2.3 m (91 in.) from the vehicle.
- The horizontal marking of the Rear Top View Parking Guidance shows the tailgate opening distance and 1.5 m (60 in.) from the vehicle.

i Information

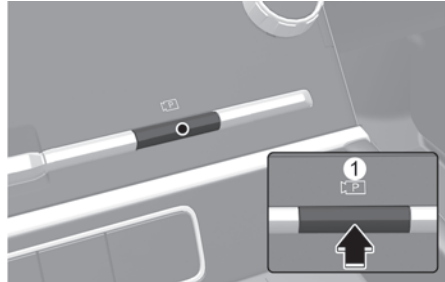
You can set the following Warning Methods:

- Parking Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

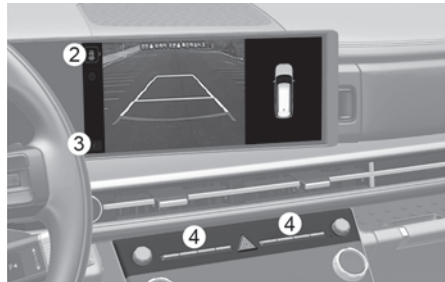
Rear View Monitor Operation

Parking/View button



Press the Parking/View button (1) while the gear is in P (Park), D (Drive) or N (Neutral) to turn on the Rear View Monitor.

Rear view



Operating conditions

- The gear is shifted to R (Reverse).
- The Parking/View button (1) is pressed while the gear is in P (Park), N (Neutral) or D (Drive), and vehicle speed is 10 km/h (6 mph) or less.

Touch the Change View button (2) to select rear view or rear top view.

Off conditions

- The gear is shifted to P (Park).
- The Parking/View button (1) or the Infotainment system screen button (3) is Pressed.
- The gear is in N (Neutral) or D (Drive) and the vehicle speed is above 10 km/h (6 mph).
- The previous button ◀ (4) is selected on the rear view menu.

i Information

When the gear is in R (Reverse), the rear view does not turn off.

Extended Rear View Monitor

The rear view will maintain showing on the screen to help you when parking.

Operating conditions

The gear is in P (Park), N (Neutral) or D (Drive), and vehicle speed is 10 km/h (6 mph) or less.

Off conditions

- When vehicle speed is above 10 km/h (6 mph), the rear view will turn off.
- Shift the gear to P (Park), the rear view will turn off.
- Press the Parking/View button (1), the rear view will turn off.

i Information

- The rear view does not turn off regardless of the mode when the gear is in R (Reverse).
- The rear view is always displayed when the gear is in R (Reverse).
- The rear parking guide lines are displayed in rear view and rear top view mode. (When selecting **Setup > Vehicle > Driver Assistance > Parking Safety > Camera Settings > Display Contents > Rear View Parking Lines** in the infotainment system)

Rear View Monitor Malfunction and Limitations

Rear View Monitor malfunction

When Rear View Monitor is not working properly, or the screen flickers, or the camera image does not display properly, have your vehicle inspected by an authorized HYUNDAI dealer.

Limitations of Rear View Monitor

WARNING

- The wide-rear view camera does not cover the complete area behind the vehicle. The driver should always check the rear area directly through the inside rearview mirror and outer side view mirror before parking or backing up.
- The perceived distance on the screen may differ from the actual distance as the Rear View Monitor displays the calibrated video of the wide rear view camera. Also, the parking guide lines may be different from the actual distance if the vehicle is tilted due to cargo load or position. Make sure to directly check the vehicle's surroundings for safety.
- Always keep the wide-rear view camera lens clean. If the lens is covered with foreign material, it may adversely affect camera performance and Rear View Monitor may not operate properly. However, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone, etc.). This may damage the camera lens.

Surround View Monitor (SVM)

 if equipped

Surround View Monitor uses the wide view cameras and displays images around your vehicle through the infotainment system to help with safe parking.

Information

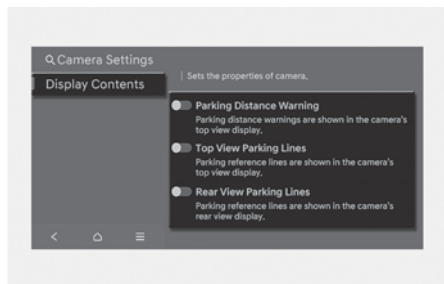
Surround View Monitor uses the following sensors:

- Wide-front view camera
- Wide-side view cameras
- Wide-rear view camera

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Surround View Monitor settings

Camera settings



- You can change Surround View Monitor "**Display Contents**" by touching the setup icon (⚙️) on the screen while Surround View Monitor is operating, or by selecting **Setup > Vehicle > Driver Assistance > Parking Safety > Camera Settings** in the infotainment system while the vehicle is on.
- In the "**Display Contents**", you can change settings for **Parking Distance Warning**, **Top View Parking Lines** and **Rear View Parking Lines**.

i Information

You can set the following Warning Methods:

- Parking Safety Priority

For more information, refer to the "Driver assistance system settings" section in this chapter.

Parking Distance Warning

When the **Parking Distance Warning** is selected, parking distance warning appears on the top view area of the Surround View Monitor screen.

Top View Parking Guidance

When the **Top View Parking Lines** is selected, parking guidance appears on the top view area of the Surround View Monitor screen when the front top view and rear top view is displayed.

- The image will be displayed only when Parking Distance Warning is warning the driver.

i Information

The horizontal marking of the Rear Top View Parking Guidance shows the tailgate opening distance and the distance of 2 m (79 in.) from the vehicle.

Rear View Parking Guidance

When the **Rear View Parking Lines** is selected, parking guidance is displayed in the rear view.

i Information

The horizontal guide lines show the distance of 0.5 m (20 in.), 1 m (40 in.) and 2.3 m (91 in.) from the vehicle.

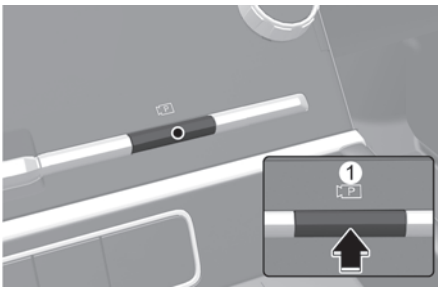
Surround View Monitor Auto On

With the engine on, select **Setup > Vehicle > Driver Assistance > Parking Safety > Surround View Monitor Auto On** in the infotainment system to use the function.

If **Surround View Monitor Auto On** is selected, the front parking assist view screen appears when the Parking Distance Warning warns you while driving in D (Drive).

Surround View Monitor Operation

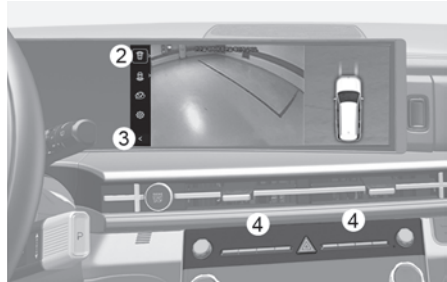
Parking/View button



Press the Parking/View button (1) to turn on Surround View Monitor.

Press the button again to turn off the function.

Front view



The front view appears on the screen when the gear is in N (Neutral) or D (Drive) to assist in parking.

You may select top view, front view, and side view using the change view button (2).

Operating conditions

- The gear is shifted to N (Neutral) or D (Drive) from R (Reverse) and the vehicle speed is 10 km/h (6 mph) or less.
- The Parking/View button (1) is pressed, while the gear is in P (Park), N (Neutral) or D (Drive), and vehicle speed is 10 km/h (6 mph) or less.
- **Surround View Monitor Auto On** function is operated.

When **Driver Assistance > Parking Safety > Surround View Monitor Auto On** is selected in the infotainment system, the front view while parking appears.

- The rear view is selected by pressing the change view button (2) after pressing.

i Information

When the front view is activated, the latest used view mode is displayed.

Off conditions

- The gear is shifted from N (Neutral) or D (Drive) to P (Park) or R (Reverse).
- The Parking/View button (1) or the Infotainment system button (4) is pressed.
- Vehicle speed is above 10 km/h (6 mph).
- The previous button  (3) is selected.

i Information

Surround View Monitor will turn off when vehicle speed is above 10 km/h (6 mph). However, Surround View Monitor will not turn on again although vehicle speed drops below 10 km/h (6 mph).

Rear view

The rear view appears on the screen to assist in parking.

You may select top view, rear view, and side view using the change view button (2).

Operating conditions

- The gear is shifted to R (Reverse).
- The rear view is selected by pressing the change view button (2) after pressing the Parking/View button (1), while the gear is in P (Park), N (Neutral) or D (Drive), and vehicle speed is 10 km/h (6 mph) or less.

Off conditions

- The gear is shifted from R (Reverse) to P (Park).
- The Parking/View button (1) is pressed, while the gear is in P (Park).

i Information

When the gear is in R (Reverse), the rear view does not turn off even if the infotainment system button (4) is pressed.

3D view

The 3D view shows the image around the vehicle from various angles.

You can change angles by tapping the screen. Press the 3D View button again to return to the initial angle.

Operating conditions

When the 3D view is selected by pressing the change view button (2):

- The gear is in P (Park), N (Neutral) or D (Drive) when vehicle speed is below 10 km/h (6 mph).
- The Surround View Monitor is turned on when the gear is in R (Reverse).

Off conditions

When the gear is in P (Park), N (Neutral) or D (Drive):

- The gear is shifted to P (Park) from N (Neutral) or D (Drive).
- The Parking/View button (1) or the Infotainment system button (4) is pressed.
- Vehicle speed is above 10 km/h (6 mph).

When the gear is in R (Reverse):

- The gear is shifted to P (Park).

Information

3D view does not display guide lines.

Surround View Monitor Malfunction and Limitations

Surround View Monitor malfunction

When Surround View Monitor is not working properly, or the screen flickers, or the camera image does not display properly, have your vehicle inspected by an authorized HYUNDAI dealer.

Limitations of Surround View Monitor

- When the vehicle is stopped for a long time in winter or when the vehicle is parked in an indoor parking lot, the exhaust fumes may temporarily blur the image.
- The screen may be displayed abnormally, and an icon will appear at the top view area of the screen under the following circumstances:
 - The tailgate is opened
 - The driver or front passenger door is opened
 - The side view mirror is folded

WARNING

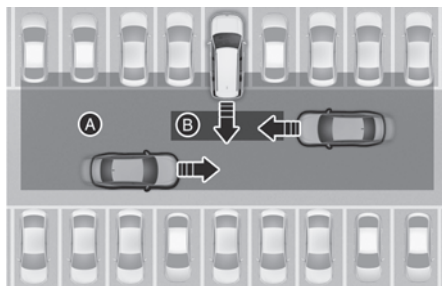
- Always look around your vehicle to make sure there are no objects or obstacles before moving the vehicle. What you see on the screen may differ from the actual vehicle's location.
 - The image shown on the screen may differ from the actual distance of the object. Also, the parking guide lines may not be accurate if the vehicle is tilted due to cargo load or position. Make sure to directly check the vehicle's surroundings for safety.
 - Surround View Monitor is designed to be used on a flat surface. Therefore, if used on roads with different heights such as curbs and speed bumps, the image in the screen may not look correct.
 - Always keep the camera lens clean. If the lens is covered with foreign material, it may adversely affect camera performance and Surround View Monitor may not operate properly. However, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone, etc.). This may damage the camera lens.
-

Information

Surround View Monitor uses the cameras installed on the vehicle to show images around the vehicle through the infotainment system. The image shown on the screen may look unnatural depending on the surroundings.

Rear Cross-traffic Collision-Avoidance Assist (RCCA)

Rear Cross-Traffic Collision-Avoidance Assist helps detect vehicles approaching from the rear left or right while your vehicle is reversing and warns you of a possible collision with a warning message and a warning sound. Also, Rear Cross-Traffic Collision-Avoidance Assist may assist with braking your vehicle to help avoid a collision.



- [A] Rear Cross-Traffic Collision Warning operating range
[B] Rear Cross-Traffic Collision-Avoidance Assist operating range

CAUTION

Warning timing may vary depending on the speed of the approaching vehicle.

Information

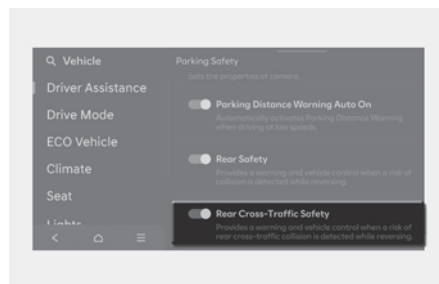
Rear Cross-Traffic Collision-Avoidance Assist uses the following sensor:

- Rear corner radars

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Rear Cross-traffic Collision-Avoidance assist settings

Rear Cross-Traffic Safety



With the engine on, select **Setup > Vehicle > Driver Assistance > Parking Safety > Rear-Cross Traffic Safety** in the infotainment system to turn on Rear Cross-Traffic Collision-Avoidance Assist and deselect to turn off the function.

WARNING

When the vehicle is restarted, Rear Cross-Traffic Collision-Avoidance Assist always turn on. However, if 'Off' is selected after the vehicle is restarted, the driver should always be aware of the surroundings and drive safely.

CAUTION

When the trailer's connector is plugged into your vehicle, Rear Cross-Traffic Collision-Avoidance Assist automatically turns off. In this case, you cannot get help Rear Cross-Traffic Collision-Avoidance Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

i Information

You can set the Warning Timing and following Warning Methods:

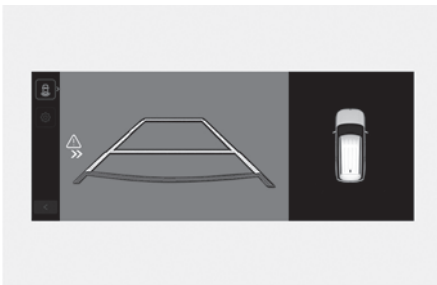
- Warning Volume/Haptic Warning

For more information, refer to the "Driver assistance system settings" section in this chapter.

Rear Cross-Traffic Collision-Avoidance Assist Operation

Rear Cross-Traffic Collision-Avoidance Assist will warn and help control the vehicle depending on collision risk level: 'Collision Warning', 'Emergency Braking' and 'Stopping vehicle and ending brake control'.

Collision Warning

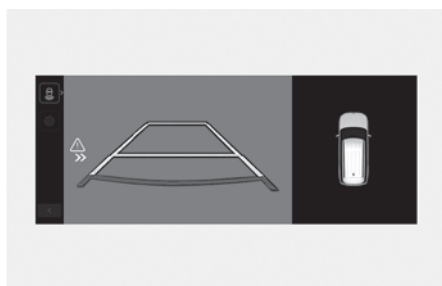


- To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the side view mirror will blink and a warning will appear on the instrument cluster. At the same time, an audible warning will sound. If Rear View Monitor is operating, a warning will also appear on the infotainment system.
- Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:
 - The gear is shifted to R (Reverse)
 - Vehicle speed is below 8 km/h (5 mph)
 - The approaching vehicle is within about 25 m (82 ft.) from the left and right side of your vehicle
 - The speed of the vehicle approaching from the left and right is above 5 km/h (3 mph)

i Information

- If the operating conditions are satisfied, there will be a warning whenever the vehicle approaches from the left or right side even though your vehicle speed is 0 km/h (0 mph).
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the instrument cluster.

Emergency Braking



- To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the side view mirror blinks and a warning message appears on the instrument cluster. At the same time, an audible warning sounds. A warning also appears on the infotainment system.
- Emergency Braking will be assisted to help prevent a collision with approaching vehicles from the left and right.

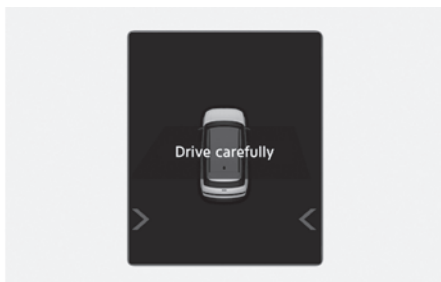
- Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:
 - The gear is shifted to R (Reverse)
 - Vehicle speed is below 8 km/h (5 mph)
 - The approaching vehicle is within approximately 1.5 m (5 ft.) from the left and right side of your vehicle
 - The speed of the vehicle approaching from the left and right is above 5 km/h (3 mph)
 - Emergency Braking is assisted to help prevent collision with approaching vehicles from the left and right.

WARNING

Brake control will end when:

- The approaching vehicle is out of the detecting range
- The approaching vehicle passes behind your vehicle
- The approaching vehicle does not drive toward your vehicle
- The approaching vehicle speed slows down
- The driver depresses the brake pedal with sufficient power

Stopping vehicle and ending brake control



- When the vehicle is stopped due to emergency braking, the "**Drive carefully**" warning message will appear on the instrument cluster.
- For your safety, the driver should depress the brake pedal immediately and check the surroundings.
- Brake control will end after approximately 2 seconds of emergency brake control.
- During emergency braking, braking control by Rear Cross-Traffic Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the brake pedal.

WARNING

Take the following precautions when using Rear Cross-Traffic Collision-Avoidance Assist:

- For your safety, only change the Settings after parking the vehicle at a safe location.
- If any other system's warning message is displayed or audible warning is generated, Rear Cross-Traffic Collision-Avoidance Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Rear Cross-Traffic Collision-Avoidance Assist if the surrounding is noisy.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate if the driver applies the brake pedal to avoid collision.
- During Rear Cross-Traffic Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Rear Cross-Traffic Collision-Avoidance Assist, the vehicle's basic braking will function normally.
- When Rear Cross-Traffic Collision-Avoidance Assist is operating, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal.

- Rear Cross-Traffic Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- Rear Cross-Traffic Collision-Avoidance Assist may warn the driver late or may not warn the driver depending on the road and driving conditions.
- The driver has the responsibility to control the vehicle. Do not solely depend on Rear Cross-Traffic Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Rear Cross-Traffic Collision-Avoidance Assist on people, animal, objects, etc. It may cause serious injury or death.

CAUTION

The brake control may not operate properly depending on the status of ESC (Electronic Stability Control).

There will only be a warning when:

- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged in a different function

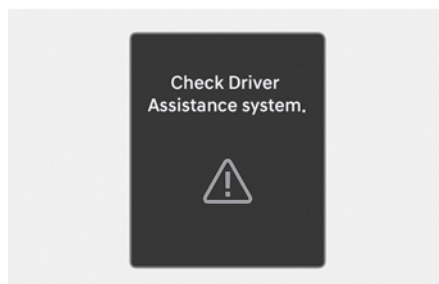
Information

If braking is assisted by Rear Cross-Traffic Collision-Avoidance Assist, the driver must immediately depress the brake pedal and check vehicle surroundings.

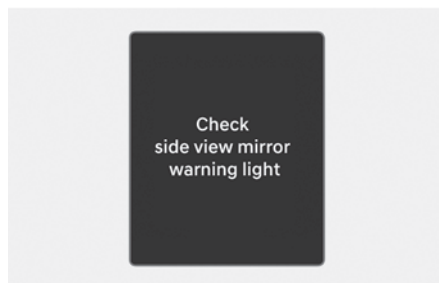
- Brake control will end when the driver depresses the brake pedal with sufficient power.
- After shifting the gear to R (Reverse), braking control will operate once for left and right vehicle approach.

Rear Cross-Traffic Collision-Avoidance Assist Malfunction and Limitations

Rear Cross-Traffic Collision-Avoidance Assist malfunction



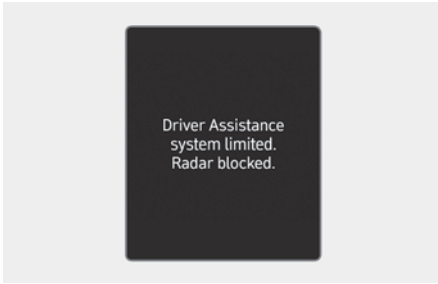
When Rear Cross-Traffic Collision-Avoidance Assist is not working properly, the "**Check Driver Assistance system.**" warning message appears on the instrument cluster for several seconds, and the master () warning light illuminates on the instrument cluster. If this occurs, have vehicle inspected by an authorized HYUNDAI dealer.



When the side view mirror warning light is not working properly, the "**Check side view mirror warning light**" warning message appears on the instrument cluster for several seconds, and the master () warning light illuminates on the instrument cluster. If this occurs, have

your vehicle inspected by an authorized HYUNDAI dealer.

Rear Cross-Traffic Collision-Avoidance Assist disabled



When the rear bumper around the rear-side radar or sensor is covered with foreign material, such as snow or rain, or installing a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Rear Cross-Traffic Collision-Avoidance Assist.

If this occurs, the "**Driver Assistance system limited. Radar blocked.**" warning message appears on the instrument cluster.

Rear Cross-Traffic Collision-Avoidance Assist will operate properly when such foreign material or trailer, etc., is removed.

If Rear Cross-Traffic Collision-Avoidance Assist does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

⚠ WARNING

- Even though the warning message does not appear on the instrument cluster, Rear Cross-Traffic Collision-Avoidance Assist may not operate properly.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate properly in an area (for example, open terrain), where any objects are not detected after turning ON the vehicle.

⚠ CAUTION

Turn off Rear Cross-Traffic Collision-Avoidance Assist to install or remove a trailer, carrier, or another attachment. Turn on Rear Cross-Traffic Collision-Avoidance Assist when finished.

Limitations of Rear Cross-Traffic Collision-Avoidance Assist

Rear Cross-Traffic Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly under the following circumstances:

- Departing from where trees or grass are overgrown
- Departing from where roads are wet
- Speed of the approaching vehicle is fast or slow

Braking control may not work, driver's attention is required in the following circumstances:

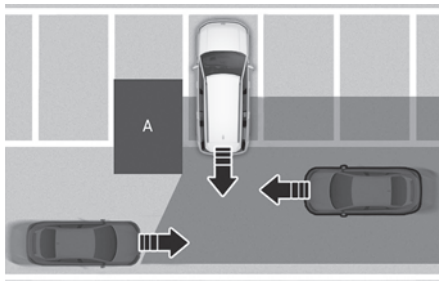
- The vehicle severely vibrates while driving over a bumpy road, uneven road or concrete patch
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- The tire pressure is low or a tire is damaged
- The braking system has been modified
- Remote Smart Parking Assist is operating (if equipped)

i Information

For more information on the limitations of the rear corner radar, refer to the "Blind-Spot Collision-Avoidance Assist (BCA)" section in this chapter.

⚠ WARNING

- **Driving near a vehicle or structure**

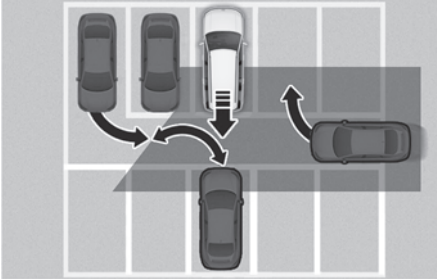


[A] Structure

Rear Cross-Traffic Collision-Avoidance Assist may be limited when driving near a vehicle or structure, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary.

Always check your surroundings while backing up.

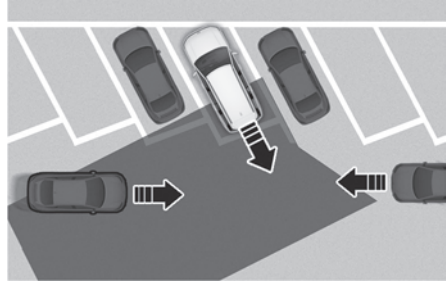
- **When the vehicle is in a complex parking environment**



Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles which are parking or pulling out near your vehicle (for example, a vehicle leaving beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.). If this occurs, the function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

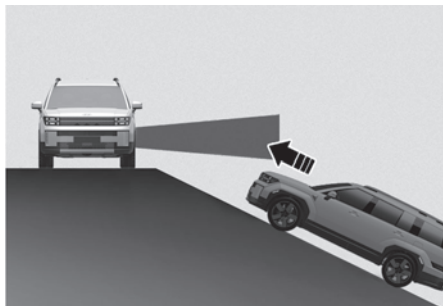
- **When the vehicle is parked diagonally**



Rear Cross-Traffic Collision-Avoidance Assist may be limited when backing up diagonally, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary.

Always check your surroundings while backing up.

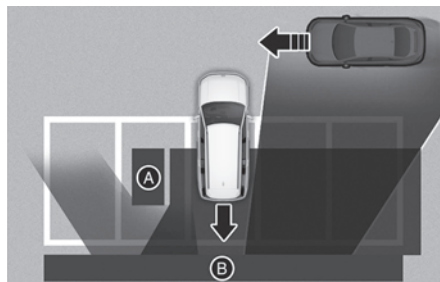
- When the vehicle is on or near a slope



Rear Cross-Traffic Collision-Avoidance Assist may be limited when the vehicle is on an uphill or downhill slope, or near it, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary.

Always check your surroundings while backing up.

- Pulling into the parking space where there is a structure

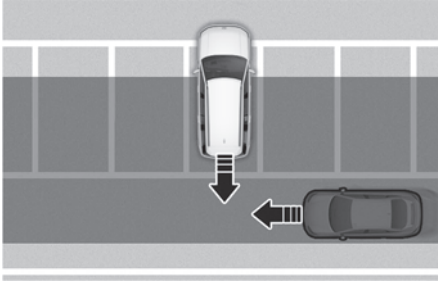


[A] Structure
[B] Wall

Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by in front of you when parking in reverse into a parking space with a wall or structure in the rear or side area. If this occurs, the function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

- When the vehicle is parked rearward



Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by behind you when parking in reverse into a parking space. If this occurs, the function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

WARNING

- When you are towing a trailer or another vehicle, turn off Rear Cross-Traffic Collision-Avoidance Assist for safety reasons.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate for 3 seconds after the vehicle is started, or the rear corner radars are initialized.

Parking Distance Warning (PDW)

Parking Distance Warning uses the front, side, and rear ultrasonic sensors to detect and warns you if a person, animal, or object is within a certain distance when your vehicle is stopped or driving at low speed.

Information

Parking Distance Warning uses the following sensors:

- Front ultrasonic sensors
- Rear ultrasonic sensors
- Front side ultrasonic sensors
- Rear side ultrasonic sensors

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Parking Distance Warning settings

CAUTION

When the trailer's connector is plugged into your vehicle, Reverse Parking Distance Warning automatically turns off. In this case, you cannot get help Reverse Parking Distance Warning. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

Parking Distance Warning Auto On

To use **Parking Distance Warning Auto On**, select **Setup > Vehicle > Driver Assistance > Parking Safety > Parking Distance Warning Auto On** in the infotainment system.

Information

When **Parking Distance Warning Auto On** is selected, the Parking Safety button indicator () stays on.

Information

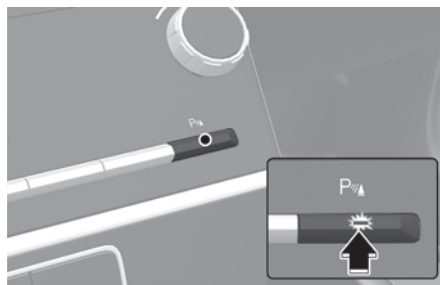
You can set the following Warning Methods:

- Warning Volume

For more information, refer to the "Driver assistance system settings" section in this chapter.

Parking Distance Warning Operation

Parking Safety button



Press the Parking Safety () button to turn on Forward/Reverse Parking Distance Warning. Press the button again to turn off the function.

- When the gear is shift to R (Reverse), Parking Distance Warning automatically turns on (Parking Safety button indicator on).

Forward Parking Distance Warning

Forward Parking Distance Warning operates under the following conditions.

- The gear is shifted from R (Reverse) to D (Drive) with Reverse Parking Distance Warning on
- The gear is in D (Drive) and the Parking Safety (PWA) button indicator light is on
- Shift to D (Drive) when the function is off
(Only when **Vehicle > Driver Assistance > Parking Safety > Parking Distance Warning Auto On** is selected in the infotainment system.)

i Information

- Forward Parking Distance Warning operates only when the vehicle's forward speed is below 10 km/h (6 mph).
- Forward Parking Distance Warning is deactivated if the vehicle speed reaches above 30 km/h (18 mph). It may not reactivate although the vehicle speed drops below 10 km/h (6 mph).
(Only when **Vehicle > Driver Assistance > Parking Safety > Parking Safety** is not selected in the infotainment system.)
- When the gear is shifted to R (Reverse), 'Forward Parking Distance Warning' does not warn about objects detected near the front inside area, and only warns about objects detected near the front outside area within 60 cm (24 in.).

Warning indicator and sound

The corresponding indicator illuminates whenever each ultrasonic sensor detects a person or object in its sensing range. Also an audible warning sounds.

Distance from Object	Warning Indicator		Warning Sound
	Cluster	Infotainment	
60-120 cm (24-48 in.)			Buzzer beeps intermittently (front inside)
30-60 cm (12-24 in.)			Beeps more frequently
30 cm (within 12 in.)			Beeps continuously

- When more than two objects are detected at the same time, the closest one is warned with an audible warning.
- The shape of the indicator in the illustration may differ from the actual vehicle.
- The front outer side warnings turn on when the vehicle is in R (Reverse).

Side Parking Distance Warning

 if equipped

Side Parking Distance Warning operates under the following conditions.

- The gear is shifted to R (Reverse).
- The gear is shifted from R (Reverse) to D (Drive).
- The gear is in D (Drive) and the Parking Safety (P^{SA}) button indicator light is on
- Shift to D (Drive) when the function is off

(Only when **Vehicle > Driver Assistance > Parking Safety > Parking Distance Warning Auto On** is selected in the infotainment system.)

Information

- Side Parking Distance Warning operates when the vehicle's forward speed is below 10 km/h (6 mph).
- Side Parking Distance Warning operated only when Forward or Rearward Parking Distance Warning is on.

Warning indicator and sound

The corresponding indicator illuminates whenever each ultrasonic sensor detects a person or object in its sensing range.

Distance from Object	Warning Indicator		Warning Sound
	Cluster	Infotainment	
60-120 cm (24-48 in.)			-
30-60 cm (12-24 in.)			-
30 cm (within 12 in.)			Beeps continuously

- If an object located within 30 cm (12 in.) from the side of the vehicle's path is detected, an audible warning sounds.
- If an object outside the side of the vehicle's path is detected, the warning indicator is displayed.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Reverse Parking Distance Warning

Reverse Parking Distance Warning operates under the following conditions.

- The gear is shifted to R (Reverse).

Warning indicator and sound

The corresponding indicator illuminates whenever each ultrasonic sensor detects a person or object in its sensing range. Also an audible warning sounds.

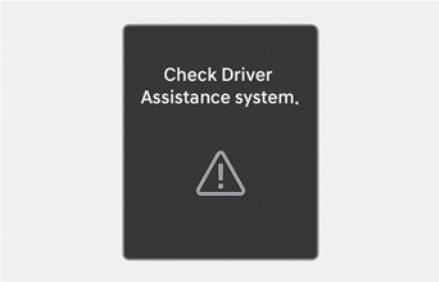
Distance from Object	Warning Indicator		Warning Sound
	Cluster	Infotainment	
60-120 cm (24-48 in.)			Buzzer beeps intermittently
30-60 cm (12-24 in.)			Beeps more frequently
30 cm (within 12 in.)			Beeps continuously

- When more than two objects are detected at the same time, the closest one is warned with an audible warning.
- The shape of the indicator in the illustration may differ from the actual vehicle.

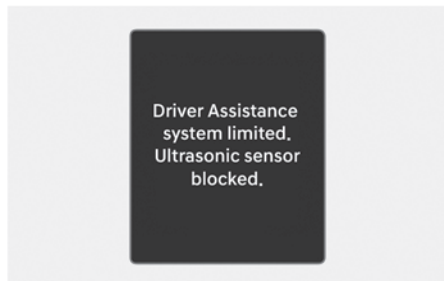
Parking Distance Warning Malfunction and Limitations

When Parking Distance Warning is not working properly, the warning message appears on the cluster.

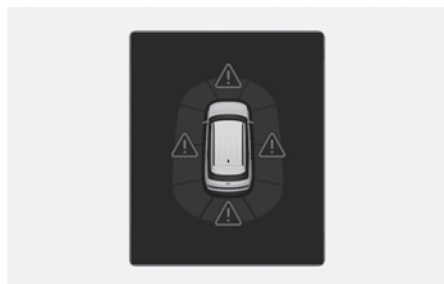
You can check the warning in the service message of the Utility view on the cluster. Have the vehicle inspected by an authorized HYUNDAI dealer.



Parking Distance Warning disabled



If this occurs the **"Driver Assistance system limited. Ultrasonic sensor blocked."** warning message appears on the instrument cluster. Parking Distance Warning operates properly when snow, rain or foreign material is removed. If Parking Distance Warning does not operate properly after obstruction (snow, rain, or foreign material) is removed (including trailer, carrier, etc., from the rear bumper), have your vehicle inspected by an authorized HYUNDAI dealer.



When the Parking Distance Warning is operating, if the function is not working normally or the ultrasonic sensor is blocked, the master warning light (⚠) appears in the direction of the corresponding sensor. You can check the warning in the Utility view on the cluster.

Limitations of Parking Distance Warning

- Parking Distance Warning may not operate properly when:
 - There is excessive moisture or frost on the sensor
 - Sensor is covered with foreign substance, such as snow or water (Parking Distance Warning operates properly when such substance is removed.)
 - The weather is extremely hot or cold
 - The sensor or sensor assembly is disassembled
 - The surface of the sensor is pressed hard or hit with a hard object
 - The surface of the sensor is scratched with a sharp object
 - The sensors or its surrounding area is directly sprayed with high pressure washer
 - Objects generating ultrasonic waves, such as vehicle horns, loud motorcycle engines, or truck air brakes, are near your vehicle.

- Parking Distance Warning may malfunction when:
 - Heavy rain or water spray is present
 - Water flows on the surface of the sensor
 - Affected by another vehicle's sensors
 - The sensor is covered with snow or ice
 - Driving on uneven road, gravel roads or bushes
 - Objects that generate ultrasonic waves are near the sensor
 - License plate is installed in a different spot from the original location
 - The vehicle bumper height or ultrasonic sensor installation has been modified
 - Attaching equipment or accessories next to the ultrasonic sensors
- The following objects may not be detected:
 - Sharp or slim objects, such as ropes, chains or small poles.
 - Narrow objects, such as corners of a square column
 - Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
 - Objects smaller than 100 cm (40 in.) in length and narrower than 14 cm (6 in.) in diameter.
 - Pedestrians, animals or objects that are very close to the ultrasonic sensors
 - An object in the Side space between the front corner ultrasonic sensor and the rear corner ultrasonic sensor or an object approaching the Side space



WARNING

- Parking Distance Warning is a supplemental function. The operation of Parking Distance Warning can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the front and rear views before and while parking.
 - Your new vehicle warranty does not cover any crashes or damage to the vehicle due to the malfunction of Parking Distance Warning.
 - Pay close attention when driving near objects, pedestrians, and especially children. Some objects may not be detected by the ultrasonic sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.
 - Parking Distance Warning does not warn you in the order of detection. It varies depending on the speed of the vehicle or the shape of a person, animal, or object.
 - If the Parking Distance Warning does not operate properly, have your vehicle inspected by an authorized HYUNDAI dealer.
-

Reverse Parking Collision-Avoidance Assist (PCA)

 if equipped

Reverse Parking Collision-Avoidance Assist helps detect pedestrians or objects behind the vehicle and may warn you or assist you with braking to help avoid a collision while your vehicle is reversing.

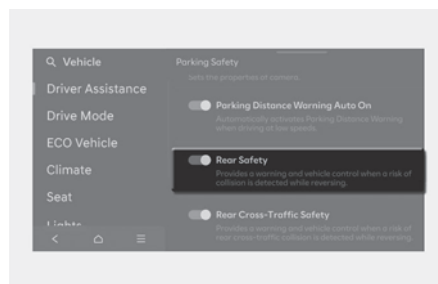
Information

Reverse Parking Collision-Avoidance Assist uses the following sensors:

- Wide-rear view camera
- Rear ultrasonic sensors

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Reverse Parking Collision-Avoidance Assist settings



With the engine on, select or deselect **Vehicle > Driver Assistance > Parking Safety** in the infotainment system to set whether to use each function.

- If **"Rear Safety"** is selected, Parking Collision-Avoidance Assist warns the driver and assists with braking when a collision with a pedestrian or an object is imminent from behind.

CAUTION

When the trailer's connector is plugged into your vehicle, Parking Collision-Avoidance Assist automatically turns off. In this case, you cannot get help Parking Collision-Avoidance Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

Information

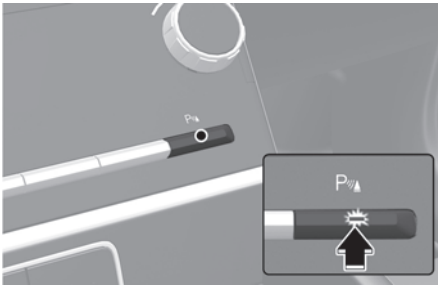
You can set the following Warning Methods:

- Warning Volume/Haptic Warning

For more information, refer to the "Driver assistance system settings" section in this chapter.

Reverse Parking Collision-Avoidance Assist Operation

Turning Parking Collision Avoidance Assist On/Off



Press and hold the Parking Safety (P $\triangle$) button more than 2 seconds, to turn the Parking Collision-Avoidance Assist on or off.

Operating conditions

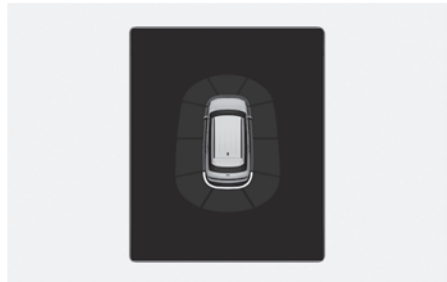
If Reverse Parking Collision-Avoidance Assist detects a risk of collision behind the vehicle with a pedestrian or an object, Reverse Parking Collision-Avoidance Assist warns the driver with an audible warning and warning message on the cluster. If Surround View Monitor is operating, a warning appears on the infotainment screen.

If collision is imminent, Reverse Parking Collision-Avoidance Assist assists you with braking.

Select "**Rear Safety**" from the "**Parking Safety**" menu of the infotainment system. Parking Collision-Avoidance Assist is enabled when the following conditions are satisfied:

- The tailgate and door are closed
- The parking brake is released
- A trailer is not connected
- The gear is shifted to R (Reverse)
- Vehicle speed is below 10 km/h (6 mph) (detecting pedestrians)
- Vehicle speed is below 4 km/h (2.4 mph) (detecting objects)
- Parking Collision-Avoidance Assist components such as the wide-rear view camera and the rear ultrasonic sensors are in normal conditions

When Reverse Parking Collision-Avoidance Assist activates, a line appears behind the vehicle image in the instrument cluster.



i Information

Reverse Parking Collision-Avoidance Assist operates only once after shifting the gear to R (Reverse). To reactivate Parking Collision-Avoidance Assist, shift the gear from another gear to R (Reverse).

Off conditions

If collision is imminent, Reverse Parking Collision-Avoidance Assist assists you with braking. Braking assist is released after 5 minutes. Immediately depress the brake pedal and check vehicle surroundings. Braking assist is also released in the following conditions when:

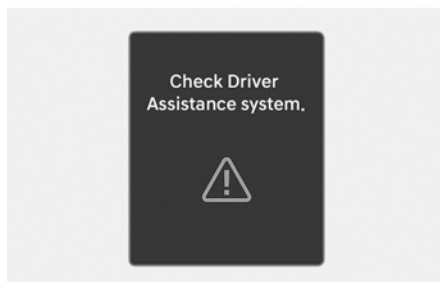
- The gear is shifted to P (Park) or D (Drive)
- The brake pedal is depressed with sufficient power

i Information

When Parking Collision-Avoidance Assist is activated while reversing, braking control will be released after 5 minutes and the parking brake will be engaged.

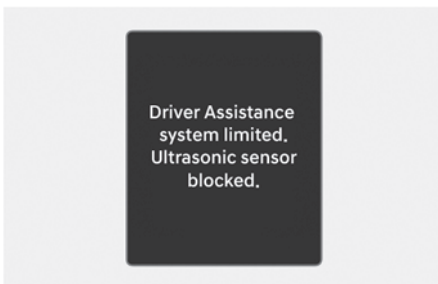
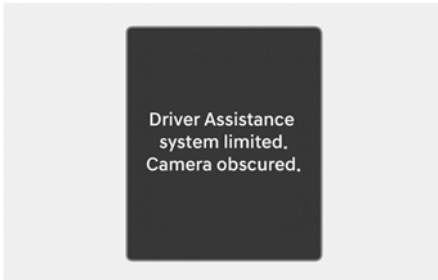
Reverse Parking Collision-Avoidance Assist Malfunction and Limitations

Reverse Parking Collision-Avoidance Assist malfunction



When Reverse Parking Collision-Avoidance Assist or other related functions are not working properly, the "**Check Driver Assistance system.**" warning message appears on the instrument cluster, and Reverse Parking Collision-Avoidance Assist turns off automatically. Have your vehicle inspected by an authorized HYUNDAI dealer.

Reverse Parking Collision-Avoidance Assist disabled



The "**Driver Assistance system limited. Camera obscured.**" or "**Driver Assistance system limited. Ultrasonic sensor blocked.**" warning message appears on the instrument cluster if the following situations occur:

- The wide-rear view camera or rear ultrasonic sensor(s) is covered with foreign material, such as snow or rain, etc.
- There is inclement weather, such as heavy snow, heavy rain, etc.

If this occurs, Reverse Parking Collision-Avoidance Assist may turn off or may not operate properly. Check whether the wide-rear view camera and rear ultrasonic sensors are clean.

Limitations of Reverse Parking Collision-Avoidance Assist

Reverse Parking Collision-Avoidance Assist may not assist braking or warn the driver even if there are pedestrians or objects under the following circumstances:

- Problems with vehicle
 - Any non-factory equipment or accessory is installed
 - Your vehicle is unstable due to a crash or other causes
 - Bumper height or rear ultrasonic sensor installation has been modified
 - Wide-rear view camera(s) or ultrasonic sensor(s) is damaged
 - Wide-rear view camera(s) or the ultrasonic sensor(s) is stained with foreign material, such as snow, dirt, etc.
 - Wide-rear view camera(s) is obscured by a light source or by inclement weather, such as heavy rain, fog, snow, etc.
 - Braking system components such as brake discs, calipers, etc., are modified
 - Wheel alignment has problems or suspension components are modified
 - Accessories are attached to the steering wheel, or steering components are modified
 - The vehicle is installed with a snow chain, spare tire or different size wheel.
- Problems with the surroundings
 - The surrounding is very bright or very dark
 - Outside temperature is very high or very low
 - The wind is either strong (above 20 km/h (12 mph)) or blowing perpendicular to the rear bumper

- Objects generating excessive noise, such as vehicle horns, loud motorcycle vehicles or truck air brakes, are near your vehicle
- An ultrasonic sensor with similar frequency is near your vehicle
- The road is slippery or inclined
- There are road markings, such as zigzag lanes, crosswalk markings and road signs
- There is a shadow or light reflection on the road
- Driving through a narrow aisle or parking space
- Driving through a unpaved road, partial paved road, uneven road, speed bumps, incline road, etc
- A trailer, carrier or other attachment is installed on the rear of the vehicle
- Problems with pedestrian or object
 - The image of the pedestrian in the rear view camera is indistinguishable from the background
 - The pedestrians are difficult to detect
 - There is ground height difference between the vehicle and the pedestrian
 - The pedestrian is near the rear edge of the vehicle
 - The pedestrian is not standing upright
 - The pedestrian is either very short or very tall to detect
 - The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
 - The pedestrian is wearing clothing that does not reflect ultrasonic waves well
 - Size, thickness, height, or shape of the object does not reflect ultrasonic waves well (for example, low object, narrow object, circular pillar, small pillar, corners of a square pillar, bush, curbs, carts, edge of a wall, etc.)
- The pedestrian or the object is moving
- The pedestrian or the object is very close to the rear of the vehicle
- There is a large object such as a wall is behind the pedestrian or the object
- The object is not located at the front or rear center of your vehicle
- The object is not parallel to the rear bumper
- Problems with driving condition
 - The driver drives the vehicle immediately after shifting to R (Reverse) or D (Drive)
 - The driver accelerates or circles the vehicle
 - The vehicle is driven immediately after starting the vehicle



WARNING

Take the following precautions when using Reverse Parking Collision-Avoidance Assist:

- Always exercise extreme caution while driving. The driver is responsible for braking and safe driving.
- Always pay attention to road and traffic conditions while driving, whether or not there is a warning.
- Always look around your vehicle to make sure there are no pedestrians or objects before moving the vehicle.
- The performance of Reverse Parking Collision-Avoidance Assist may vary under certain conditions. If vehicle speed is above 4 km/h (2 mph), Reverse Parking Collision-Avoidance Assist will provide collision avoidance assist only when pedestrians are detected. Always look around and pay attention when driving your vehicle.

- Reverse Parking Collision-Avoidance Assist may operate differently under certain conditions. If the vehicle moves forward and backward repeatedly, Reverse Parking Collision-Avoidance Assist may fail to assist braking or to warn the driver. Always pay attention when driving your vehicle.
- Some objects may not be detected by the rear ultrasonic sensors due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.
- Reverse Parking Collision-Avoidance Assist may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.
- Do not solely rely on Parking Collision-Avoidance Assist. Doing so may lead to vehicle damage or injuries.

CAUTION

- Noise may be heard when sudden braking occurs to avoid a collision.
- If any other warning sound such as the seat belt warning chime is already generated, Parking Collision-Avoidance Assist warning may not sound.
- Parking Collision-Avoidance Assist may not work properly if the bumper has been damaged, replaced or repaired.
- Parking Collision-Avoidance Assist may not operate properly if interfered by strong electromagnetic waves.
- Playing the vehicle audio system at high volume may prevent passengers from hearing Parking Collision-Avoidance Assist warning sounds.

- Turn off Parking Collision-Avoidance Assist when towing a trailer. If towing and moving in reverse, Parking Collision-Avoidance Assist will activate as it detects the trailer.

- The brake control may not operate properly depending on the status of ESC (Electronic Stability Control).

There will only be a warning when:

- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged in a different function

CAUTION

Take the following precautions to maintain optimal performance of the detecting sensors:

- Always keep the wide-rear view cameras and ultrasonic sensors clean.
- Do not use any cleanser containing acid or alkaline detergents when cleaning the camera lens. Use only a mild soap or neutral detergent, and rinse thoroughly with water.
- Do not spray the wide-rear view cameras or the rear ultrasonic sensors or their surrounding area directly with a high pressure washer. It may cause the wide angle cameras or the ultrasonic sensors to malfunction.
- Do not apply objects, such as a bumper sticker or a bumper guard, near the wide angle cameras or ultrasonic sensors or apply paint to the bumper. Doing so may adversely affect the performance of Parking Collision-Avoidance Assist.

- Never disassemble or apply impact on the wide angle cameras or the ultrasonic sensors components.
- Do not apply unnecessary force on the wide-rear view cameras or the ultrasonic sensors. Reverse Parking Collision-Avoidance Assist may not operate properly if the wide angle cameras or the ultrasonic sensor(s) is forcibly moved out of proper alignment. Have your vehicle inspected by an authorized HYUNDAI dealer.

i Information

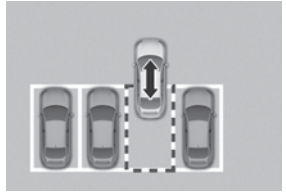
Reverse Parking Collision-Avoidance Assist can detect a pedestrian or an object when:

- A pedestrian is standing behind the vehicle
- A large obstacle, such as a vehicle, is parked in the rear center of your vehicle

Remote Smart Parking Assist (RSPA)

 If equipped

Remote Smart Parking Assist uses the front, front side, rear side, and rear ultrasonic sensors to help detect parking spaces and control vehicle steering, speed, gear shifts, and help enter and exit parking spaces remotely from outside your vehicle.

Function	Description
Remote Operation	Remotely moving forward or backward 

- Remote Smart Parking and Remote Operation function may be operated from outside the vehicle using the smart key.
- When Remote Smart Parking Assist operates, Parking Distance Warning and Surround View Monitor will also operate. For more information, refer to the "Parking Distance Warning (PDW)" and "Surround View Monitor (SVM)" sections in this chapter.

i Information

Remote Smart Parking Assist uses the following sensors:

- Front ultrasonic sensors
- Rear ultrasonic sensors
- Front side ultrasonic sensors
- Rear side ultrasonic sensors

Refer to the "Driver Assistance System Sensors" section in this chapter for the location.

Remote Smart Parking Assist Settings

CAUTION

When the trailer's connector is plugged into your vehicle, Remote Smart Parking Assist automatically turns off. In this case, you cannot get help Remote Smart Parking Assist. Pay extra attention when you drive when the function is inactive. (If a Hyundai genuine Trailer Kit that can determine whether a trailer is connected is used)

i Information

You can set the following Warning Methods:

- Warning Volume

For more information, refer to the "Driver assistance system settings" section in this chapter.

Remote Smart Parking Assist Operation

Remote Smart Parking Assist button

Parking/View button	Smart key
	

Location	Name	Symbol	Description
Inside vehicle	Parking/View button		Press and hold the Parking/View button to turn on Remote Smart Parking Assist. Also, Forward/Reverse Parking Distance warning will automatically turn on.
Smart key	Remote Start button		Press the Remote Start button after the door is locked with the vehicle off to start the vehicle remotely. Press the Remote Start button while Remote Smart Parking or Remote Operation function is operating to end function operation.
	Forward button		When using the Remote Operation function, the vehicle moves in the direction of the button while the button is pressed.
	Backward button		

Remote Operation

Operating order

Remote Operation operates in the following order:

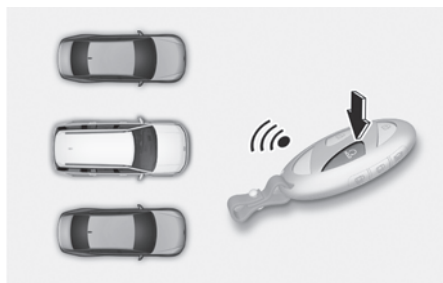
1. Getting ready to remotely move forward and backward
2. Remotely moving forward and backward

1. Getting ready to remotely move forward and backward

There are two ways to operate Remote Operation function.

Method (1): Using the function with vehicle off

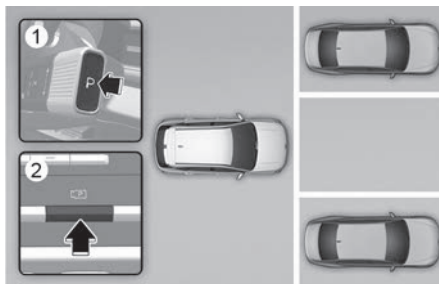
1. Within a certain range from the vehicle press the door lock (🔒) button on the smart key and lock all doors.



2. Press and hold the Remote Start button (🔑) within 4 seconds until the vehicle starts.
3. For more information on remotely starting the vehicle, refer to the "Remotely starting the engine" section in chapter 6.

Method (2): Using the function with vehicle on

- Park the vehicle in front of the space where you want to use Remote Operation function, and shift the gear to P (Park).
- Press and hold the Parking/View (🅅🅍) button to turn on Smart Parking Assist. A message "**Under Remote Control**" will appear on the infotainment system.

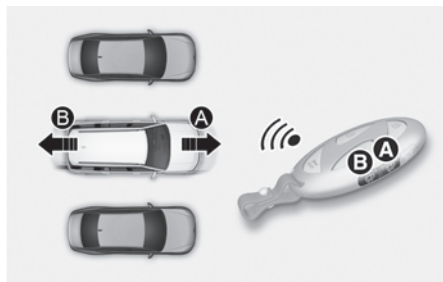


- Get out of the vehicle with the smart key and close all doors and tailgate.

i Information

'Agree' must be selected on the infotainment system and the infotainment system has to operate properly to use Remote Operation function.

2. Remotely moving forward and backward



[A] Forward
[B] Backward

1. Press and hold one of the Forward (A) or Backward (B) button on the smart key.
 - Remote Smart Parking Assist will automatically control the steering wheel, vehicle speed and gearshift. The vehicle will move in the direction of the button pressed.
 - While Remote Operation function is operating, if the you let the button go, the vehicle will stop and function control will pause. The function will start operating again when the button is pressed and held again.
2. Hold down the Forward (A) or Backward (B) button until the vehicle reaches the target location.
3. When Remote Operation is done, get in the vehicle with the smart key or press the Remote Start (HOLD) button on the smart key from outside the vehicle.
4. The message will appear on the infotainment system. The vehicle will automatically shift to P (Park) and engage the parking brake.
5. When the Remote Start (HOLD) button is pressed, the vehicle will turn off. If the driver is in the vehicle, the vehicle will retain ON position.

i Information

- Remote Operation can control the vehicle remotely using the smart key outside the vehicle.
- Check that all smart keys are outside the vehicle when using Remote Operation function.
- Remote Operation function will operate only when the smart key is within 4 m (13 ft.) from the vehicle. If there is no vehicle movement even when the Forward or Backward button is pressed on the smart key, check the distance to the vehicle and press the button again.
- The detecting range of the smart key may vary depending on the surroundings that are affected by radio waves such as transmission tower, broadcast station, etc.
- When remotely moving forward using method (1), it is recognized as an exit situation, and the vehicle moves 4 m (13 ft.) to check for pedestrians, animals or objects around the vehicle. After confirmation, the steering wheel is controlled according to the condition ahead.
- When remotely moving forward using method (2), it is recognized as a parking situation, and will immediately control the steering wheel according to the condition ahead to assist with entering the parking space and aligning the vehicle. However, performance may reduce depending on the pedestrians, animals, shape of objects, location, etc., around the vehicle.
- For moving remotely backward, both method (1) and (2) aligns the steering wheel first, and then will only move the vehicle straight.

 WARNING

- When using Remote Operation function, make sure that all passengers have gotten out of the vehicle.
- If the vehicle's battery is discharged or Remote Smart Parking Assist malfunctions when parked in a narrow parking space, Remote Operation function will not operate. Always park your vehicle in a space wide enough for you to get in or out of your vehicle.
- Please note that depending on the parking space, you may not be able to exit from the space you have entered by using Remote Operation function.
- After parking, the surrounding may change due to the movement of surrounding vehicles. If this occurs, Remote Operation function may not operate.
- Before leaving the vehicle, close windows and sunroofs, and make sure the vehicle is off before locking the doors.

Remote Operation function operation status

Operation Status	Smart Key LED	Hazard Warning Light
Under control	Green LED continuously blinks	-
Pause	Red LED continuously blinks	Blinks
Off	Red LED illuminates for 4 seconds and then turns off	Blinks 3 times and turns off
Complete	Green LED illuminates for 4 seconds and then turns off	Blinks 1 time and turns off

 Information

- Operation status by the hazard warning light may not be applicable based on the regulation of your country.
- If the smart key is not within the operating range from the vehicle (about 4 m (13 ft.)), the smart key LED will not illuminate or blink. Use the smart key within the operating range.

How to turn off Remote Operation function while operating

- Press the Parking/View (P) button while the infotainment system guides the driver using method 2.
- Shift the gear from P (Park) to any other position while the infotainment system guides the driver using method 2.
- Press the Parking Safety (P) button or select "Cancel" on the infotainment system.
- Press the Remote Start (R) button on the smart key while the vehicle is being controlled by Remote Operation function. Remote Operation function will turn off. At this time, the vehicle will turn off.
- Get on the vehicle with the smart key. Remote Operation function will turn off. At this time, the vehicle will remain on.

The function will pause in the following conditions when:

- There is a pedestrian, animal or object in the direction the vehicle is moving
- The door or tailgate is open
- The Forward (F) or Backward (B) button is not continuously pressed
- Simultaneously pressing multiple buttons on a smart key
- The smart key is not operated within 4 m (13 ft.) from the vehicle
- Button of another smart key is pressed in addition to the operating smart key

- Parking Collision-Avoidance Assist or Rear Cross-Traffic Collision-Avoidance Assist operates while the vehicle is being controlled in the reverse direction.
- The vehicle moves 7 m (22 ft.) while the smart key is pressed with Remote Operation function (maximum travel distance per button press)

The function will cancel in the following conditions when:

When Remote Operation function is canceled, the vehicle will automatically stop, shift the gear to P (Park) and engage EPB (Electronic Parking Brake).

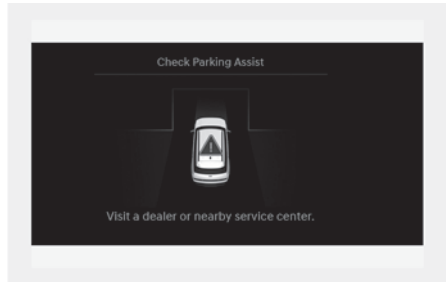
- The steering wheel is steered
- The gear is shifted while the vehicle is moving
- Operating EPB while the vehicle is moving
- The hood is open
- The brake pedal or accelerator pedal is depressed when all the doors are closed
- The smart key is outside the vehicle when the brake pedal is depressed while the driver's door is open
- Rapid acceleration occurs
- Vehicle skid occurs
- The wheel is stuck by an obstacle and cannot move
- About 3 minutes and 50 seconds has passed after Remote Operation function has started to operate

- The slope of the road exceeds the operational range
- The function is paused for more than 1 minute
- The total travel distance of the vehicle has exceeded 14 m (45 ft.) after Remote Operation function operation
- The steering wheel, gearshift, braking, and drive controls are not working properly
- There is a problem with the smart key or the smart key battery is low
- ABS, TCS or ESC system operates due to slippery road conditions
- The alarm of the Theft Alarm System sounds

Remote Smart Parking Assist Malfunction and Limitations

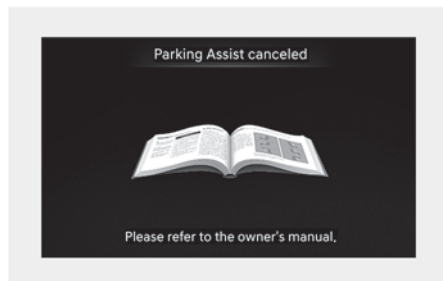
Remote Smart Parking Assist malfunction

Remote Smart Parking Assist check



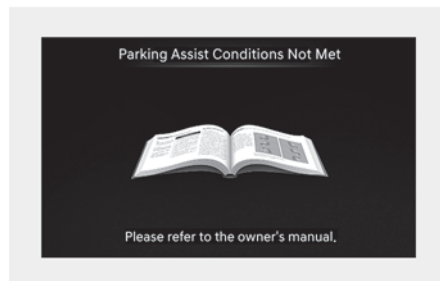
When Remote Smart Parking Assist is not working properly, the "**Check Parking Assist**" warning message will appear on the infotainment system. If the message appears, stop using Remote Smart Parking Assist, and have your vehicle inspected by an authorized HYUNDAI dealer.

Remote Smart Parking Assist canceled



When Remote Parking Assist is operating, the function can be canceled, and the **"Parking Assist Canceled"** warning message may appear regardless of the parking order. Other messages may appear depending on the situations. Follow the instructions provided on the infotainment system while parking your vehicle with Remote Parking Assist. Always look around and pay attention when using Remote Smart Parking Assist.

Remote Smart Parking Assist standby



When **"Parking Assist Conditions Not Met"** message appears when Parking/View (Ⓟ) button has been pressed and held while Remote Smart Parking Assist is in standby. After a while, press and hold the Parking/View (Ⓟ) button again to see if Remote Smart Parking Assist works.

The message appears even when the smart key's battery is low. Check the smart key battery level.

Limitations of Remote Smart Parking Assist

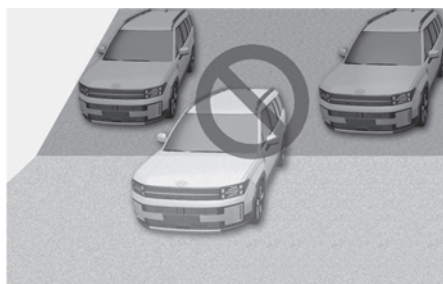
In the following circumstances, Remote Smart Parking Assist performance to park or exit the vehicle may be limited, there may be a risk of collision, or Remote Smart Parking Assist may turn off. Park or exit the vehicle manually if necessary.

- Accessories are attached to the steering wheel, or steering components are modified
- The vehicle is installed with a snow chain, spare tire or different size wheel
- Tire pressure is lower or higher than the standard tire pressure
- Your vehicle is loaded with cargo longer or wider than your vehicle or a trailer is connected to your vehicle
- Wheel alignment has problems or suspension components are modified
- Braking system components such as brake discs, calipers, etc., are modified
- Your vehicle is leaned severely to one side
- Your vehicle is equipped with a trailer hitch
- The license plate is installed differently from the original location
- There is a person, animal or object above or below the ultrasonic sensor when Remote Smart Parking Assist is activated
- The parking space is curved or diagonal
- There is an obstacle such as a person, animal or object (trash can, bicycle, motorcycle, shopping cart, narrow pillar, etc.) near the parking space
- There is a circular pillar or narrow pillar, or a pillar surrounded by objects such as fire extinguisher, etc., near the parking space
- The road surface is bumpy (curbstone, speed bump, etc.)
- The road is slippery
- The parking space is near a vehicle with higher ground clearance or big, such as a truck, etc.
- The parking space is Inclined
- There is heavy wind
- Operating Remote Smart Parking Assist on uneven roads, gravel roads, bushes, etc.
- The performance of the ultrasonic sensor is affected by extremely hot or cold weather
- The ultrasonic sensor is covered with snow or water
- An object that generates ultrasonic waves is nearby
- A wireless device with a transmission function operates near the ultrasonic sensors
- Your vehicle is affected by another vehicle's Parking Distance Warning
- The sensor is mounted or positioned incorrectly by an impact to the bumper

- When the ultrasonic sensor cannot detect the following objects:
 - Sharp or slim objects, such as ropes, chains or small poles
 - Objects smaller than 100 cm (40 in.) in length and narrower than 14 cm (6 in.) in diameter
 - Objects which tend to absorb sensor frequency, such as clothes, spongy material or snow
 - A narrow object such as a corner of a square pillar
 - Person, animal or object near the ultrasonic sensor

Remote Smart Parking Assist may not operate properly under the following circumstances:

- Parking on inclines



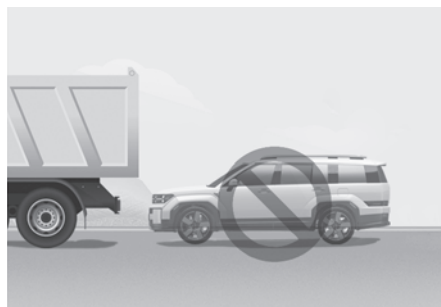
Park manually when parking on inclines.

- Parking on uneven road



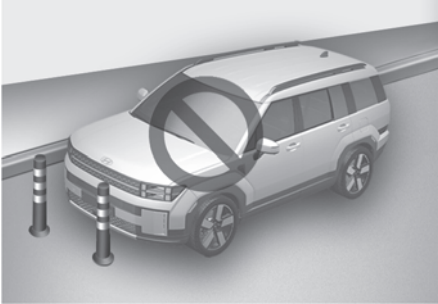
Remote Smart Parking Assist may cancel when the vehicle slips, or the vehicle cannot move due to road conditions such as pebbles or fragmented stones.

- Parking behind a truck



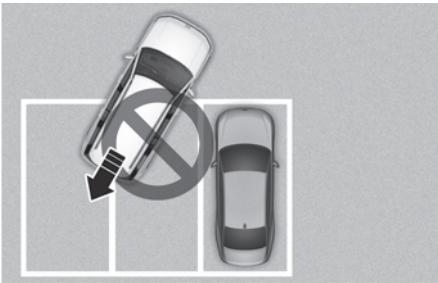
Do not use Remote Smart Parking Assist around vehicles with higher ground clearance, such as a bus, truck, etc. It may lead to a collision.

- Parking near a pillar



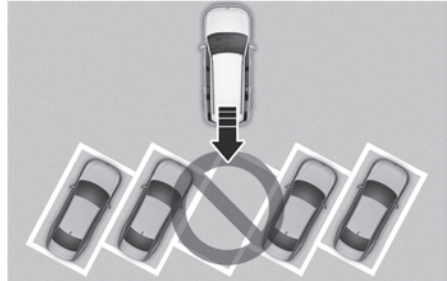
Remote Smart Parking Assist performance may reduce or collision with an obstacle may occur when there is a narrow object, circular pillar, square pillar, or a pillar surrounded by objects such as a fire extinguisher, etc., near the parking space. The driver should park the vehicle manually.

- Parking in a parking space with a vehicle on one side only



If Remote Smart Parking Assist is used, when parking in a parking space with a vehicle only on one side, your vehicle may cross the parking line to avoid the parked vehicle.

- Parking diagonal



Remote Operation may not operate properly in a diagonal parking space.

- Parking in snow



Snow may interfere with sensor operation, or Remote Smart Parking Assist may cancel if the road is slippery while parking.

WARNING

Take the following precautions when using Remote Smart Parking Assist:

- The driver is responsible for safe parking and exit when using Remote Smart Parking Assist.
- When using Remote Smart Parking Assist, stay out of the way in the direction the vehicle moves for your safety.
- Always check surroundings when using Remote Smart Parking Assist. You may collide with pedestrians, animals, or objects if they are near the sensor or are in the sensor's blind spot area.
- A collision may occur if a pedestrian, animal, or object suddenly appears while Remote Smart Parking Assist is operating.
- Do not use Remote Smart Parking Assist when under the influence of alcohol.
- Do not let children or other people to use the smart key.
- If Remote Smart Parking Assist is used continuously for a long period, it may adversely affect Remote Smart Parking Assist performance.
- Remote Smart Parking Assist may not operate properly if the vehicle needs wheel alignment adjustment such as when the vehicle tilts to one side. Have your vehicle inspected by an authorized HYUNDAI dealer.
- Noise may be heard when braking occurs by Remote Smart Parking Assist or when the brake pedal is depressed by the driver.
- Remote Smart Parking Assist may suddenly apply the brake to avoid collision.
- Use Remote Smart Parking Assist only in a parking space that is large enough for the vehicle to move safely.

NOTICE

- If the 3rd stage warning (continuous beep) of the Forward/Reverse Parking Distance Warning sounds while Remote Smart Parking Assist is operating, it means the obstacle detected is close to your vehicle. At this time, Remote Smart Parking Assist will temporarily stop operating. Make sure there are no pedestrians, animals, or objects around your vehicle.
- Depending on brake operation, the stop lights may come on while the vehicle is moving.
- If the vehicle is remotely started that has been parked in cold weather for a long time, the operation of Remote Smart Parking function may be delayed or canceled depending on vehicle condition.

Driver Assistance System Sensors

The Driver Assistance system on your vehicle uses cameras and sensors to help detect potential hazards in the vicinity of your vehicle.

Cameras

Front view camera



The front view camera is mounted near the top of the windshield inside your vehicle.

Wide-front view camera



The wide-front view camera is mounted on the front grill outside your vehicle.

Wide-side view camera



The wide-side view cameras are mounted to the bottom of the side view mirrors outside your vehicle.

Wide-rear view camera



The wide-rear view camera is mounted above the license plate holder outside your vehicle.

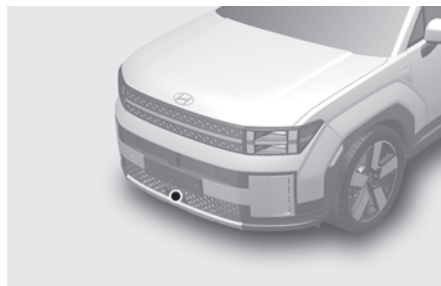
WARNING

To prevent serious injury or death:

- Never disassemble the camera sensors or camera sensor assemblies.
- Only have the detecting sensor replaced or repaired by an authorized HYUNDAI dealer.
- Never install any accessories, stickers, or tint the front windshield.
- Always keep the camera dry.
- Never place any reflective objects (e.g. white paper, mirror) on the dashboard.
- Do not use any cleanser containing acid or alkaline detergents when cleaning the camera lenses. Use only a mild soap or neutral detergent, and rinse thoroughly with water.

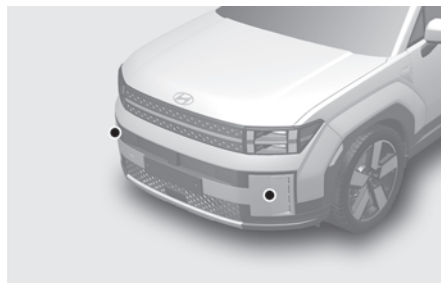
Radars

Front radar



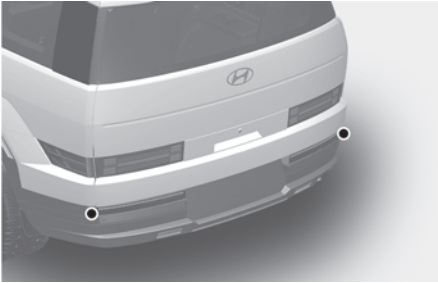
The front radar is mounted behind the front grill.

Front corner radar



The front corner radars are mounted near the front corners of your vehicle above.

Rear corner radar



The rear corner radars are mounted near the rear corners of your vehicle above the bumper.



WARNING

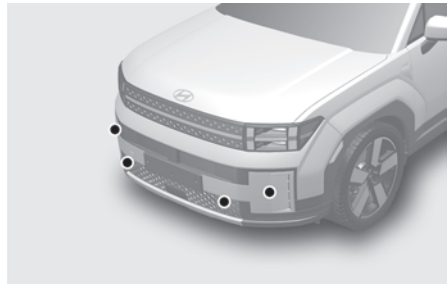
To prevent serious injury or death:

- Never disassemble the radar or radar assembly, and never apply any impact on it.
- If there is impact on or near the radar, the sensors may be damaged or not be properly aligned near the radar, even though a warning message does not appear on the instrument cluster, Driver Assistance system may not operate properly. Have the vehicle inspected by an authorized HYUNDAI dealer.
- If the radars have been replaced or repaired, have the vehicle inspected by an authorized HYUNDAI dealer.
- Use only genuine HYUNDAI parts to repair the bumper where the radar is located.

- Do not install a license plate frame or other objects such as bumper sticker, film, bumper guard, or bumper wrap near the radar.
- Driver Assistance system may not work properly if the bumper has been replaced, or the surroundings of the radar has been damaged or painted.
- If a trailer or hitch mounted carrier is attached, it may adversely affect the performance of the rear corner radar or Driver Assistance system may not operate.

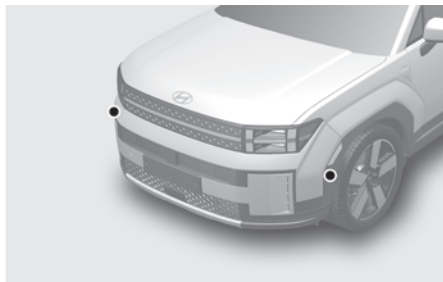
Ultrasonic sensors

Front ultrasonic sensors



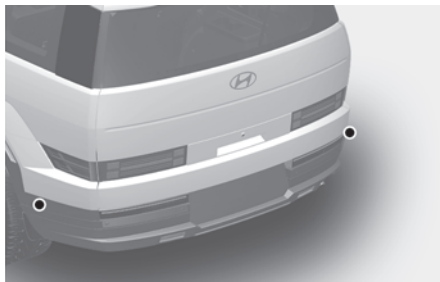
These ultrasonic sensors are mounted to the bumper outside your vehicle.

Front side ultrasonic sensors



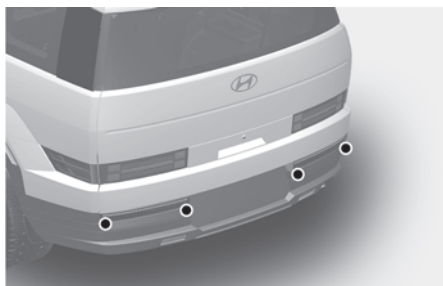
These ultrasonic sensors are mounted near the front wheels outside your vehicle.

Rear side ultrasonic sensors



These ultrasonic sensors are mounted near the rear wheels outside your vehicle.

Rear ultrasonic sensors



These ultrasonic sensors are mounted to the bumper outside your vehicle.

⚠ WARNING

To prevent serious injury or death:

- Always keep the ultrasonic sensors clean.
- Do not spray the ultrasonic sensors or the surrounding area directly with high pressure water.
- Do not apply objects such as bumper sticker or bumper guard, near the ultrasonic sensors or never apply paint to the bumper or other locations.
- Never disassemble or strike the ultrasonic sensors components.
- Do not modify the vehicle bumper height or ultrasonic sensor installations. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- If the ultrasonic sensors have been forcibly moved out of proper alignment or are damaged, have the vehicle inspected by an authorized HYUNDAI dealer.

Declaration Of Conformity

Front radar

The radio frequency components (Front Radar) complies:

Model: MRR-35
IC: 27992-MRR35

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Front corner radar (if equipped)/Rear corner radar

The radio frequency components (Rear Corner Radar) complies:

Model: 2H5TR
IC: 3659A-2H5TR

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Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.