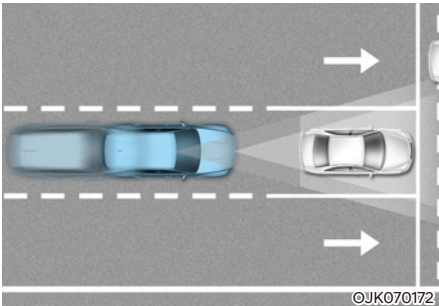


7. Driver assistance system

Driving safety	
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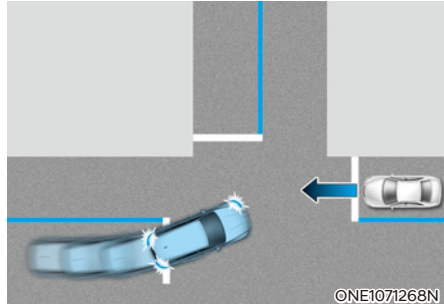
FORWARD COLLISION-AVOIDANCE ASSIST (FCA) (IF EQUIPPED)



Forward Collision-Avoidance Assist is designed to help detect and monitor the vehicle ahead or help detect a pedestrian or cyclist in the roadway and warn the driver that a collision is imminent with a warning message and an audible warning, apply emergency braking.

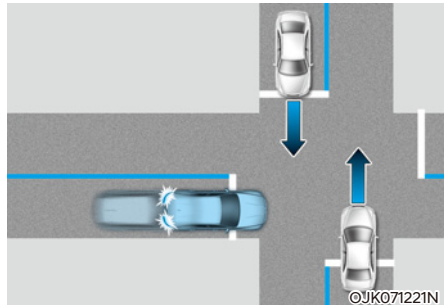
In addition, if equipped with front corner radars, when driving at high speeds, Forward Collision-Avoidance Assist will help detect vehicles in front and adjacent lanes. If a collision is imminent when changing lanes, Forward Collision-Avoidance Assist will apply emergency braking to help prevent a collision.

Junction Turning function (if equipped)



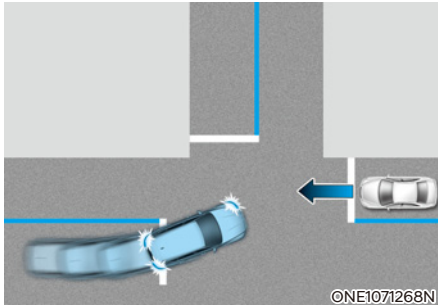
Junction Turning function will help avoid a collision with an oncoming vehicle in an adjacent lane when turning left (left-hand drive) or right (right-hand drive) at a crossroad with the turn signal on by applying emergency braking.

Junction Crossing function (if equipped)



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

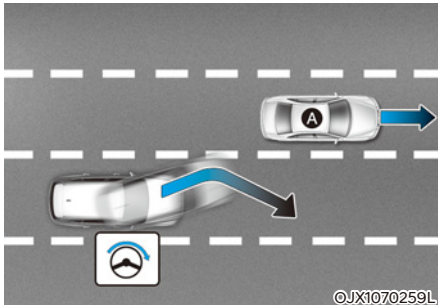
Lane-Change Oncoming function (if equipped)



[A] : Oncoming vehicle

Lane-Change Oncoming function will help avoid a collision with an oncoming vehicle when changing lanes by assisting the driver's steering.

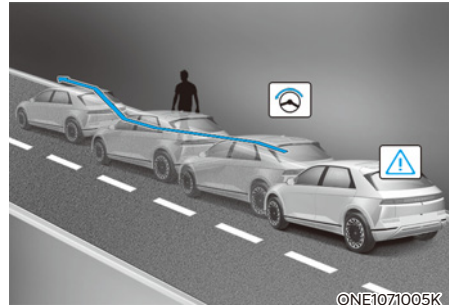
Lane-Change Side function (if equipped)



[A] : Front-side vehicle

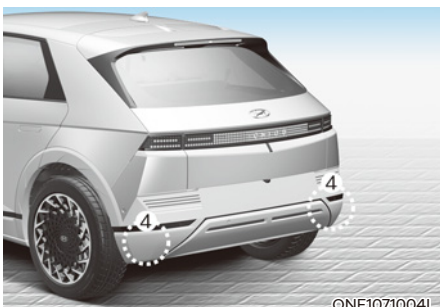
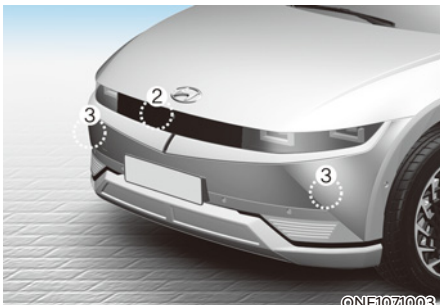
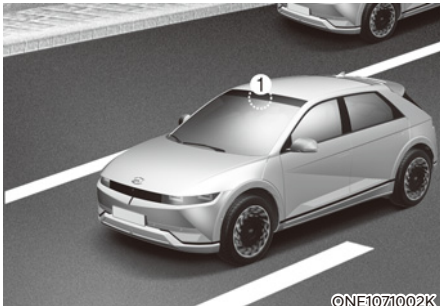
Lane-Change Side function will help avoid a collision with the vehicle ahead in the next lane when changing lanes by assisting the driver's steering.

Evasive Steering Assist function (if equipped)



- Driver steering assist
Evasive Steering Assist function will help avoid a collision with a vehicle, 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 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.

Detecting sensor



[1]: Front view camera, [2]: Front radar,
[3]: Front corner radar (if equipped),
[4]: Rear corner radar (if equipped)

Refer to the picture above for the detailed location of the detecting sensors.



CAUTION

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

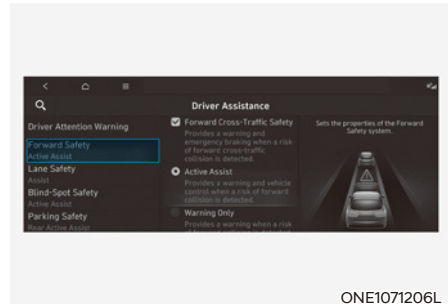
- Never disassemble the detecting sensor or sensor assembly, or apply any impact on it.
- If the detecting sensors have been replaced or repaired, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.
- Never install any accessories or stickers on the front windshield, or tint the front windshield.
- Pay extreme caution to keep the front view camera dry.
- Never place any reflective objects (for example, white paper, mirror) over the dashboard.
- Do not place any objects near the front windshield or install any accessories on the front windshield. It can affect the performance of the defogging and defrosting function of the climate control system, which may prevent the Driver Assistance systems from operating.
- Do not place objects or mount structures near the windshield. When operating the air conditioner, moisture and defrost performance may be poor, and driver assistance functions may not work.
- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard, near the front radar cover.
- Always keep the front radar and cover clean and free of dirt and debris.

Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.

- If unnecessary force has been applied to the radar or around the radar, Forward Collision-Avoidance Assist may not properly operate even though a warning message does not appear on the cluster. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.
- Use only genuine parts to repair or replace a damaged front radar cover. Do not apply paint to the front radar cover.
- Vehicles equipped with front corner radar and/or rear corner radar
 - Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard, near the front corner radar or rear corner radar.
 - The function may not work properly when the bumper has been replaced, or the surroundings of the front corner radar or rear corner radar has been damaged or paint has been applied.
 - If a trailer, carrier, etc., is installed, it may adversely affect the performance of the rear corner radar or Forward Collision-Avoidance Assist may not operate properly.

Forward Collision-Avoidance Assist settings


Setting features




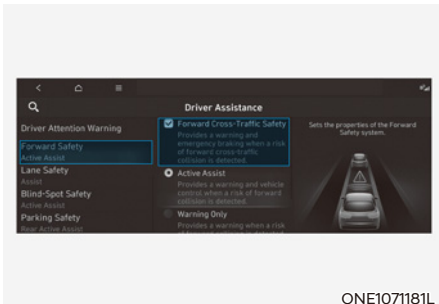
ONE1071206L

Forward Safety

With the vehicle on, select or deselect 'Driver Assistance → Forward Safety' from the Settings menu to set whether or not to use each function.

- If 'Active Assist' is selected, Forward Collision-Avoidance Assist will warn the driver with a warning message, an audible warning and steering wheel vibration depending on the collision risk levels. Braking assist or steering assist (if equipped) will be applied depending on the collision risk.
- If 'Warning Only' is selected, Forward Collision-Avoidance Assist will warn the driver with a warning message, an audible warning and steering wheel vibration depending on the collision risk levels. Braking and steering (if equipped) will not be assisted. The driver must apply the brake pedal or steer the vehicle if necessary.
- If 'Off' is selected, Forward Collision-Avoidance Assist will turn off. The  warning light will illuminate on the cluster.

The driver can monitor Forward Collision-Avoidance Assist ON/OFF status from the Settings menu. If the  warning light remains ON when Forward Collision-Avoidance Assist is ON, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



Forward Cross-Traffic Safety (if equipped)

With the vehicle on, select 'Driver Assistance → Forward Safety → Forward Cross-Traffic Safety' from the Settings menu to turn on Junction Crossing function and deselect to turn off the function.


WARNING

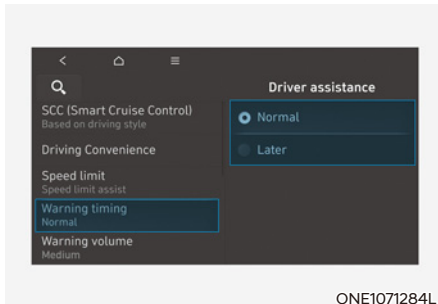
When the vehicle is restarted, Forward Collision-Avoidance Assist will always turn on. However, if 'Off' is selected, the driver should always be aware of the surroundings and drive safely.

CAUTION

- If 'Warning Only' is selected, braking and steering (if equipped) is not assisted.
- The settings for Forward Safety include 'Basic function' and 'Junction Turning', 'Lane-Change Oncoming', 'Lane-Change Side' and 'Evasive Steering Assist' (if equipped).
- If Forward Safety is set to 'Off', Junction Crossing function will not operate even when 'Forward Cross-Traffic Safety' (if equipped) is selected.
- Steering wheel vibration can be turned on or off. Select or deselect 'Driver Assistance → Haptic Warning' from the Settings menu.

Information

Forward Collision-Avoidance Assist will turn off when ESC is turned off by pressing and holding the ESC OFF button. The  warning light will illuminate on the cluster.

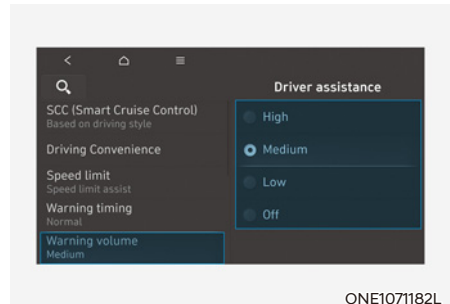


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Warning Timing

With the vehicle on, select 'Driver Assistance → Warning Timing' from the Settings menu to change the initial warning activation time for Forward Collision-Avoidance Assist.

When the vehicle is first delivered, Warning Timing is set to 'Normal'. If you change the Warning Timing, the warning time of other Driver Assistance systems may change.



ONE1071182L

Warning Volume

With the vehicle on, select 'Driver Assistance → Warning Volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Forward Collision-Avoidance Assist.

However, even if 'Off' is selected, the Warning Volume of Forward Collision Avoidance Assist will not turn off but the volume will sound as 'Low'.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.



CAUTION

- The setting of the Warning Timing and Warning Volume applies to all functions of Forward Collision-Avoidance Assist.
- Even though 'Normal' is selected for Warning Timing, if the front vehicle suddenly stops, the initial warning activation time may seem late.
- Select 'Late' for Warning Timing when traffic is light and when driving speed is slow.



Information

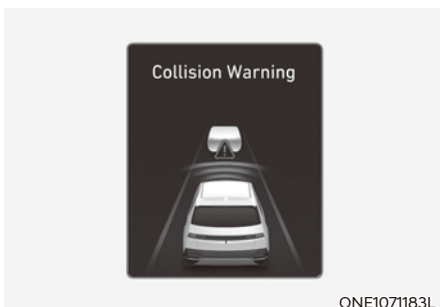
If the vehicle is restarted, Warning Timing and Warning Volume will maintain the last setting.

Forward Collision-Avoidance Assist operation

Basic function

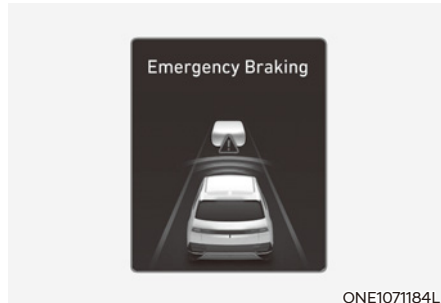
Warning and control

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



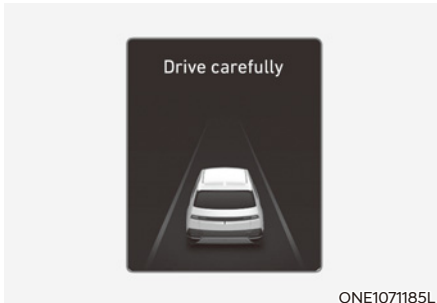
Collision Warning

- To warn the driver of a collision, the 'Collision Warning' warning message will appear on the cluster, an audible warning will sound and the steering wheel will vibrate.
- If a vehicle is detected in front, the function will operate when your vehicle speed is between approximately 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 approximately 10~85 km/h (6~53 mph).
- If 'Active Assist' is selected, braking may be assisted.



Emergency Braking

- To warn the driver that emergency braking will be assisted, the 'Emergency Braking' warning message will appear on the cluster, an audible warning will sound and the steering wheel will vibrate.
- If a vehicle is detected in front, the function will operate when your vehicle speed is between approximately 10~75 km/h (6~47 mph).
- If Forward Collision-Avoidance Assist judges that avoiding a collision is difficult even by changing the driving lane, the function will operate when your vehicle speed is between approximately 10~100 km/h (6~62 mph) (if equipped with front corner radar).
The function operation range may decrease due to the front traffic condition or the surroundings of the vehicle.
- If a pedestrian or cyclist is detected in front, the function will operate when your vehicle speed is between approximately 10~65 km/h (6~40 mph).
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the vehicle, pedestrian or cyclist ahead.



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 approximately 2 seconds.

Junction Turning function (if equipped)

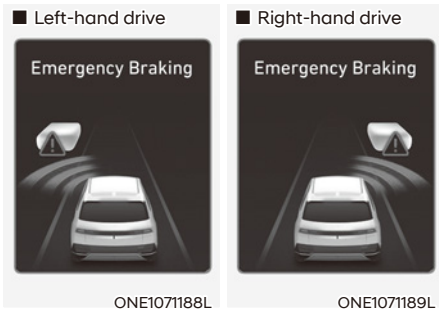
Warning and control

Junction Turning 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, 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 approximately 10~30 km/h (6~19 mph) and the oncoming vehicle speed is between approximately 30~70 km/h (19~44 mph).
- If 'Active Assist' is selected, braking may be assisted.



Emergency Braking

- To warn the driver that emergency braking will be assisted, the 'Emergency Braking' 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 approximately 10~30 km/h (6~19 mph) and the oncoming vehicle speed is between approximately 30~70 km/h (19~44 mph).
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the oncoming vehicle.

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 approximately 2 seconds.

i Information

If the driver's seat is on the left side, Junction Turning function will operate only when the driver turns left. If the driver's seat position is on right side, the function will operate only when you turn right.

Junction Crossing function (if equipped)

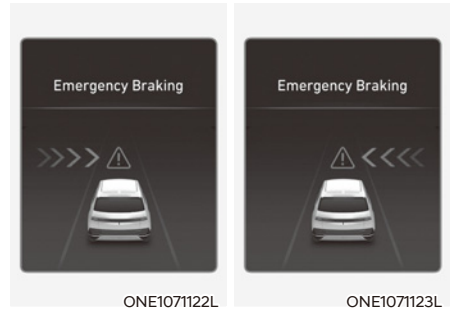
Warning and control

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'



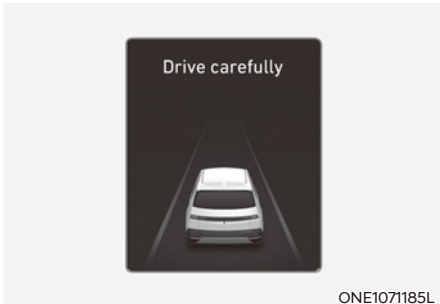
Collision Warning

- To warn the driver of a collision, 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 approximately 10~30 km/h (6~19 mph) and the crossing vehicle speed is between approximately 10~60 km/h (6~37 mph).
- If 'Active Assist' and 'Forward Cross-Traffic Safety' are selected, braking may be assisted.



Emergency Braking

- To warn the driver that emergency braking will be assisted, the 'Emergency Braking' 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 approximately 10~30 km/h (6~19 mph) and the crossing vehicle speed is between approximately 10~20 km/h (6~12 mph).
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the crossing vehicle.



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 approximately 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.

Lane-Change Oncoming function (if equipped)

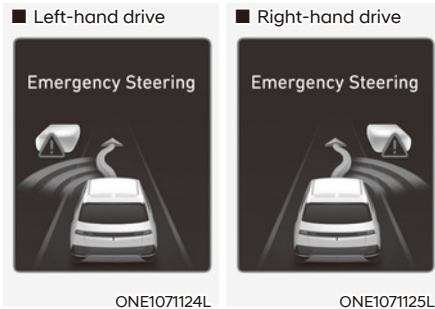
Warning and control

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, 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 approximately 40~145 km/h (25~90 mph) and the oncoming vehicle speed is approximately above 10 km/h (6 mph) and the relative speed with your vehicle is approximately below 200 km/h (124 mph).



Emergency Steering

- To warn the driver that emergency steering will be assisted, the 'Emergency Steering' 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 approximately 40~145 km/h (25~90 mph) and the oncoming vehicle speed is approximately above 10 km/h (6 mph) and the relative speed with your vehicle is approximately below 200 km/h (124 mph).
- In emergency steering situation, steering is assisted by the function to help prevent collision with the oncoming vehicle.

Lane-Change Side function (if equipped)

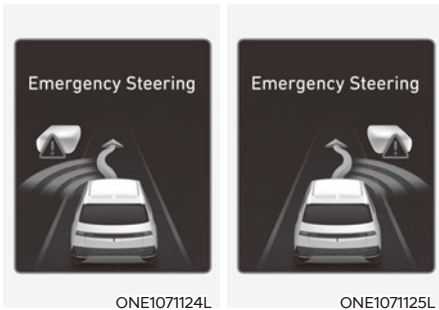
Warning and control

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, 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 approximately 40~145 km/h (25~90 mph).



Emergency Steering

- To warn the driver that emergency steering will be assisted, the 'Emergency Steering' 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 approximately 40-145 km/h (25-90 mph).
- In emergency steering situation, steering is assisted by the function to help prevent collision with the front-side vehicle.

CAUTION

Lane-Change Side function does not operate if the vehicle speed of the oncoming vehicle from the front side is 0 km/h (0 mph).

Evasive Steering Assist function (if equipped)

Warning and control

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, the 'Emergency Steering' 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 approximately 40-85 km/h (25-53 mph).
- If there is a risk of collision with a vehicle, pedestrian and cyclist in front, the steering will be assisted to help prevent collision when the driver steers the vehicle to avoid collision.



Emergency Steering (Evasive steering assist)

- To warn the driver that emergency steering will be assisted, the 'Emergency Steering' 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 approximately 65~75 km/h (40~47 mph).
- If there is high risk of collision with a pedestrian and cyclist 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.



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, pedestrian and cyclist, Evasive steering assist will be canceled if collisions with other objects (vehicles, pedestrians, or cyclists) are expected.
- Evasive steering assist may not operate if space to avoid collision in the driving lane is insufficient.



Information

For more details on warning messages, refer to Collision Warning in "Basic Function".



Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.



WARNING

Take the following precautions when using Forward Collision-Avoidance Assist:

- For your safety, change the Settings after parking the vehicle at a safe location.
- With 'Active Assist' or 'Warning Only' selected, when ESC is turned off by pressing and holding the ESC OFF button, Forward Collision-Avoidance Assist will turn off automatically. In this case, Forward Collision-Avoidance Assist cannot be set from the Settings menu and the warning light will illuminate on the cluster which is normal. If ESC is turned on by pressing the ESC OFF button, Forward Collision-Avoidance Assist will maintain the last setting.
- Forward Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- The driver should hold 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.

- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn the driver late or may not warn the driver.
- 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 is displayed 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.



WARNING

- Even if there is a problem with Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate normally.
- 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, pedestrian and 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.
- When a collision with a surrounding vehicle is expected, Lane-Change Oncoming, Lane-Change Side and Evasive Steering Assist functions will only warn the driver (if equipped).

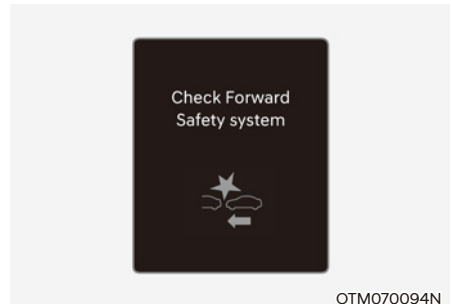


Information



- 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 cluster type or theme selected from the instrument cluster.

Forward Collision-Avoidance Assist malfunction and limitations

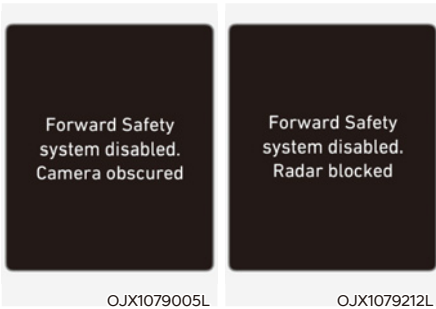
Forward Collision-Avoidance Assist malfunction





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When Forward Collision-Avoidance Assist is not working properly, the 'Check Forward Safety' warning message will appear, and the  and  warning lights will illuminate on the cluster. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

Forward Collision-Avoidance Assist disabled



When the front windshield where the front view camera is located, front radar cover, bumper or sensor is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Forward Collision-Avoidance Assist.

If this occurs the 'Forward Safety system disabled. Camera obscured' or the 'Forward Safety system disabled. Radar blocked' warning message, and the  and  warning lights will illuminate on the cluster.

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

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

WARNING

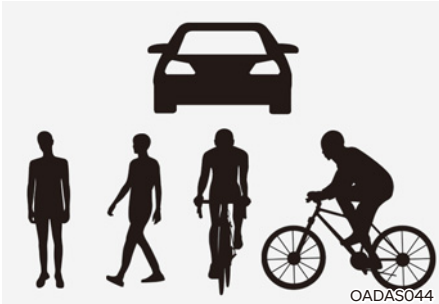
- Even though the warning message or warning light does not appear on the cluster, Forward Collision-Avoidance Assist may not properly operate.
- Forward Collision-Avoidance Assist may not properly operate in an area (for example, open terrain), where any substance are not detected after turning ON the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

Limitations of Forward Collision-Avoidance Assist

Forward Collision-Avoidance Assist may not operate normally, 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 vehicle 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 headlamps are not on or are not bright
- Driving through steam, smoke or shadow
- Only part of the vehicle, pedestrian or cyclist is detected
- The vehicle in front is a bus, heavy truck, truck with a unusually shaped luggage, trailer, etc.
- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps 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, 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 large 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 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
- The vehicle in front steers in the opposite direction of your vehicle to avoid a collision
- With a vehicle in front, your vehicle changes lane at low speed
- 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 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 as a pedestrian or cyclist



The illustration above shows the image the front view camera and front radar will detect 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 similar 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 tollgate, 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

Junction Crossing, Lane-Change Oncoming, Lane-Change Side, Evasive Steering Assist function (if equipped)

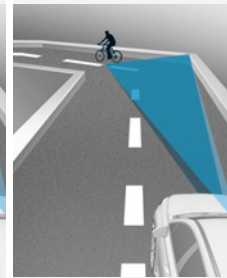
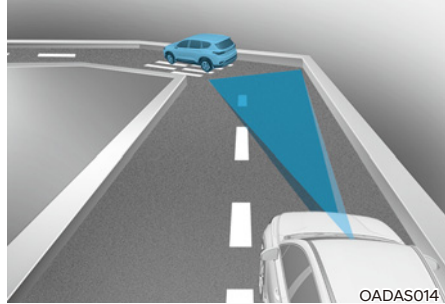
- The temperature around the front corner radar or rear corner radar is high or low
- A trailer or carrier is installed around the rear corner radar
- The front corner radar or rear corner radar is covered with snow, rain, dirt, etc.
- The bumper around the front corner radar or rear corner radar is 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
- 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



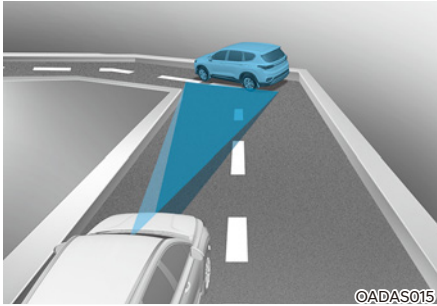
WARNING

- **Driving on a curved road**

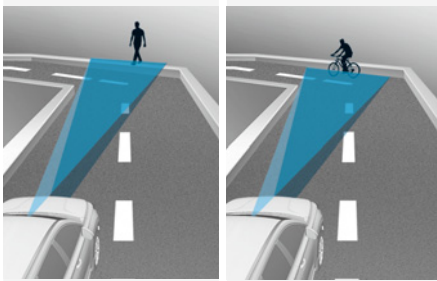


Forward Collision-Avoidance Assist may not detect other vehicles, pedestrians or cyclists in front of you on curved roads adversely affecting the performance of the sensors. This may result in no warning, braking assist or steering assist (if equipped) when necessary.

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



OADAS015

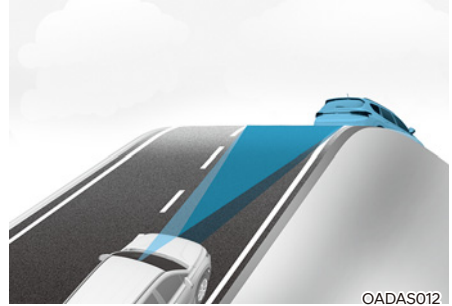


OADAS017

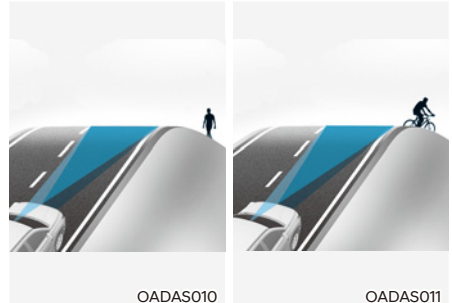
OADAS019

Forward Collision-Avoidance Assist may detect a vehicle, 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 wheel (if equipped). Always check the traffic conditions around the vehicle.

- **Driving on a sloped road**



OADAS012



OADAS010

OADAS011

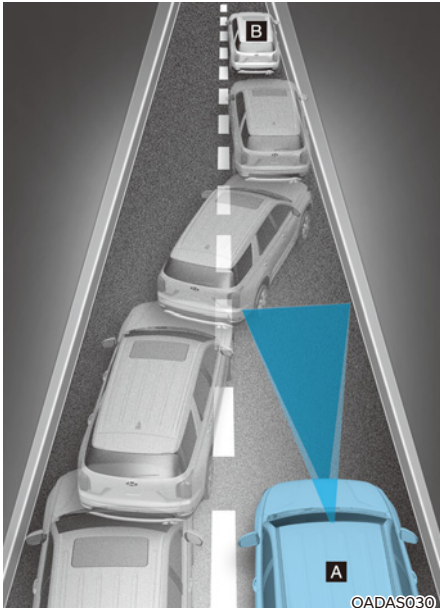
Forward Collision-Avoidance Assist may not detect other vehicles, pedestrians or cyclists in front of you while driving uphill or downhill, adversely affecting the performance of the sensors.

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, pedestrian or cyclist ahead is suddenly detected.

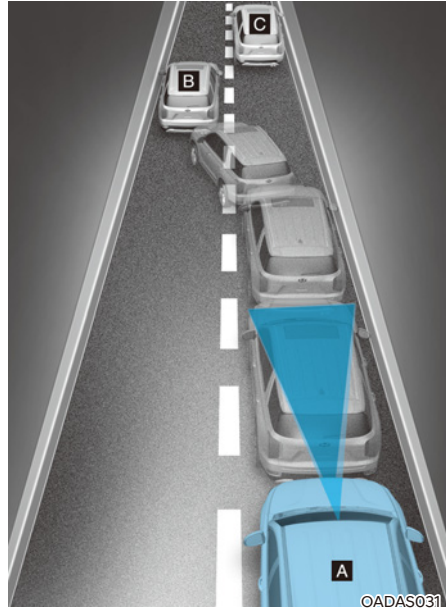
Always have your eyes on the road while driving uphill or downhill and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

- Changing lanes



[A] : Your vehicle, [B] : Lane changing vehicle

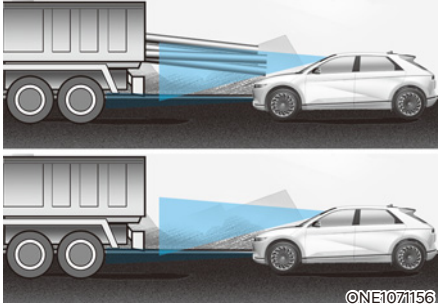
When a vehicle moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Forward Collision-Avoidance Assist may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking 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 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.



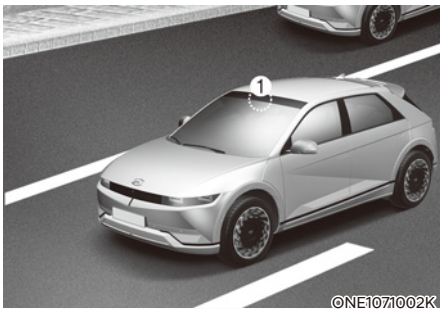
WARNING

- When you are towing a trailer or another vehicle, we recommend that Forward Collision-Avoidance Assist is turned off due to safety reasons.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles, pedestrians and cyclists are detected.
- Forward Collision-Avoidance Assist does not operate on bicycles, motorcycles, or smaller wheeled objects, such as luggage bags, shopping carts, or strollers.
- Forward Collision-Avoidance Assist may not operate normally 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.

LANE KEEPING ASSIST (LKA) (IF EQUIPPED)

Lane Keeping Assist is designed to help detect lane markings (or road edges) while driving over a certain speed. Lane Keeping Assist will warn the driver if the vehicle leaves the lane without using the turn signal, or will automatically assist the driver's steering to help prevent the vehicle from departing the lane.

Detecting sensor



[1] : Front view camera

The front view camera is used as a detecting sensor to detect lane markings (or road edges).

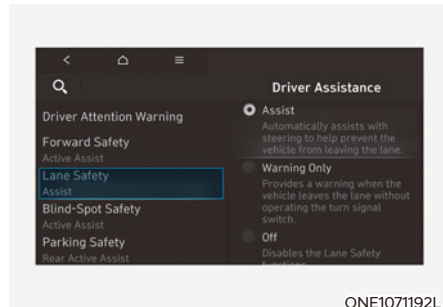
Refer to the picture above for the detailed location of the detecting sensor.

CAUTION

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


Lane Keeping Assist settings

Setting features



Lane Safety

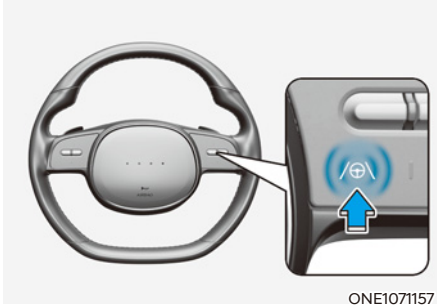
With the vehicle on, select or deselect ‘Driver Assistance → Lane Safety’ from the Settings menu to set whether or not to use each function.



- If ‘Assist’ is selected, Lane Keeping Assist will automatically assist the driver’s steering when lane departure is detected to help prevent the vehicle from moving out of its lane.
- If ‘Warning Only’ is selected, Lane Keeping Assist will warn the driver with an audible warning and steering wheel vibration when lane departure is detected. The driver must steer the vehicle.
- If ‘Off’ is selected, Lane Keeping Assist will turn off. The  indicator light will turn off on the cluster.

WARNING

- If ‘Warning Only’ is selected, steering is not assisted.
- 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 and steer the vehicle if ‘Off’ is selected.

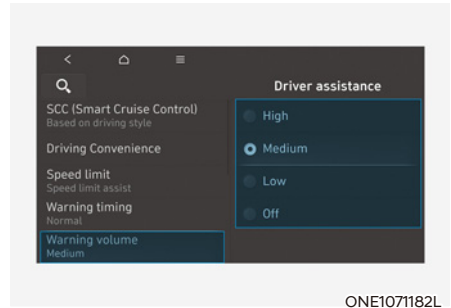
Turning Lane Keeping Assist On/Off



- Except Europe, Australia, Russia
With the vehicle on, press and hold the Lane Driving Assist button located on the steering wheel to turn on Lane Keeping Assist. The grey  indicator light will illuminate on the cluster.
Press and hold the button again to turn off the function.
If the vehicle is restarted, Lane Keeping Assist will maintain the last setting.
- For Europe, Australia, Russia
Whenever the vehicle is turned on, Lane Keeping Assist will always turn on. The grey  indicator light will illuminate on the cluster.
When Lane Keeping Assist is on, press and hold the Lane Driving Assist button to turn off the function.

Information

- **When the Lane Driving Assist button is pressed shortly, Lane Following Assist will turn on and off.**
- **When Lane Keeping Assist is turned off with the Lane Driving Assist button, the Lane Safety setting also changes to 'Off'.**



Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Lane Keeping Assist.

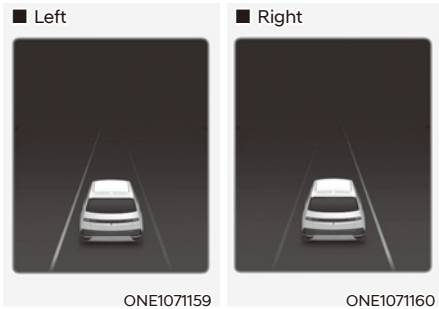
However, even if 'Off' is selected, the Hands-off Warning Volume will not be turned off. Steering wheel vibration function will also remain on even if 'Off' is selected.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may be changed.


Lane Keeping Assist operation

Warning and control


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

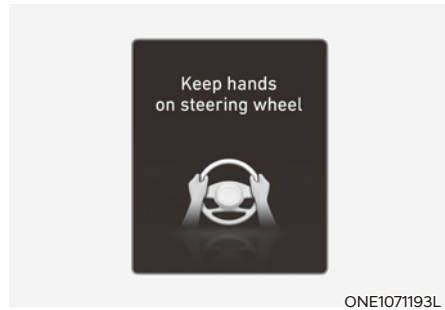


Lane Departure Warning

- To warn the driver that the vehicle is departing from the projected lane in front, the green  indicator light will blink on the cluster, the lane line will blink on the cluster depending on which direction the vehicle is veering, and an audible warning will sound. Also, the steering wheel will vibrate.
- Lane Keeping Assist will operate when your vehicle speed is between approximately 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  indicator light will blink on the cluster, and the steering wheel will make adjustments to keep vehicle inside the lane.
- Lane Keeping Assist will operate when your vehicle speed is between approximately 60~200 km/h (40~120 mph).




Hands-off warning

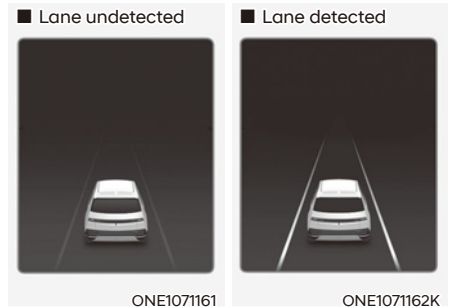
If the driver takes their hands off the steering wheel for several seconds, the 'Place hands on the steering wheel' (or 'Keep hands on the steering wheel') warning message will appear on the cluster, and an audible warning will sound in stages.

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.

Information

- For more details on setting the functions in the infotainment system, refer to “Vehicle Settings” section in chapter 4.
- When lane markings (or road edges) are detected, the lane lines on the cluster will change from grey to white and the green  indicator light will illuminate.
- 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.



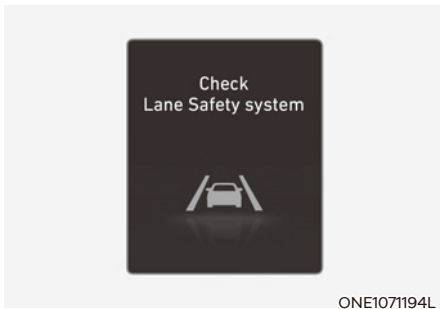
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the instrument cluster.
- Even though the steering is assisted by Lane Keeping Assist, the driver may control the steering wheel.
- The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Keeping Assist than when it is not.


Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Lane Keeping Assist malfunction and limitations

Lane Keeping Assist malfunction



When Lane Keeping Assist is not working properly, the 'Check Lane Safety system' warning message will appear and the yellow  indicator light will illuminate on the cluster. If this occurs, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

Limitations of Lane Keeping Assist

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

- The lane is contaminated or difficult to distinguish because,
 - The lane markings (or road edge) is 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 looks 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 number of lanes change or the lanes merge
- 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 tollgate, 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 details on the limitations of the front view camera, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.



WARNING

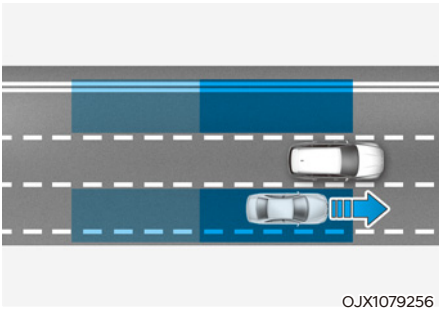
Take the following precautions when using Lane Keeping Assist:

- The driver should hold the responsibility to safely drive and control the vehicle. Do not solely rely on Lane Keeping Assist and drive dangerously.
- 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 “Limitations of Lane Keeping Assist” if the lane is not detected properly.
- When you are towing a trailer or another vehicle, we recommend that Lane Keeping Assist is turned off due to 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 is displayed 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 sharp lane changes.
 - The vehicle brakes suddenly.

BLIND-SPOT COLLISION-AVOIDANCE ASSIST (BCA) (IF EQUIPPED)

Blind-Spot Collision-Avoidance Assist is designed to help detect and monitor approaching vehicles in the driver's blind spot area and warn the driver of a possible collision with a warning message and audible warning.

In addition, if there is a risk of collision when changing lanes or driving forward out of a parking space, Blind-Spot Collision-Avoidance Assist will help avoid collision by applying the brake.

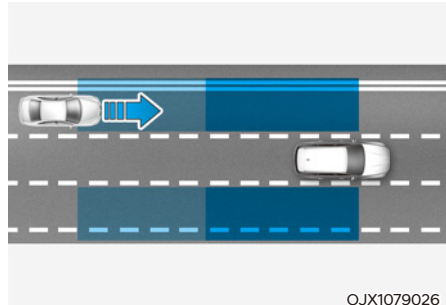


OJX1079256

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

CAUTION

The detecting range may vary depending on the speed of your vehicle. However, 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.

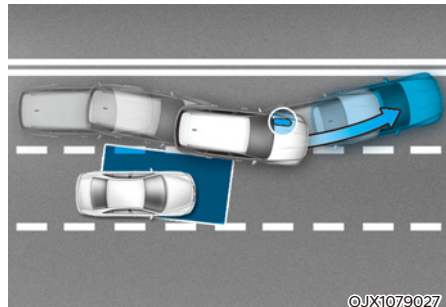


OJX1079026

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

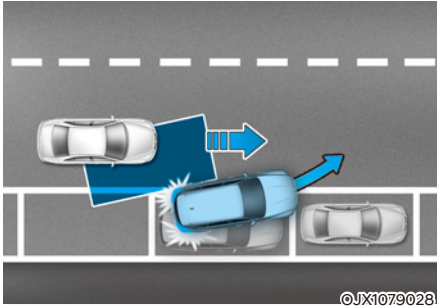
CAUTION

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



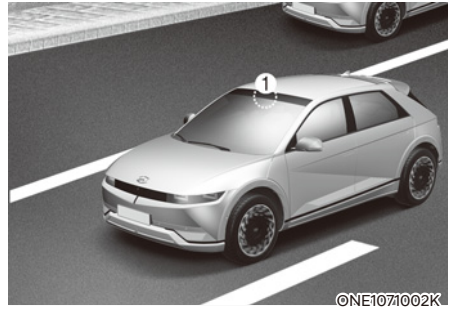
OJX1079027

When changing lanes by detecting the lane ahead, if Blind-Spot Collision-Avoidance Assist judges that there is a collision risk with an approaching vehicle in the blind spot, it will help avoid collision by applying the brake.



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 will help avoid collision by applying the brake.

Detecting sensor



[1] : Front view camera, [2] : Rear corner radar

Refer to the picture above for the detailed location of the detecting sensors.



CAUTION

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

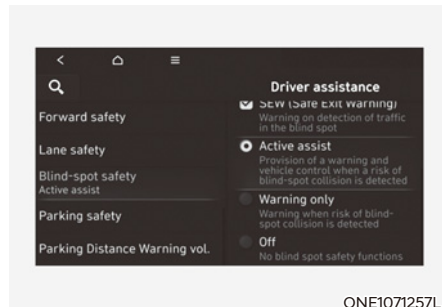
- Never disassemble the rear corner radar or radar assembly, or apply any impact on it.
- If there is impact on the rear corner radar or near the radar, even though the warning message does not appear on the cluster, Blind-Spot Collision-Avoidance Assist system may not operate properly. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

- If the rear corner radars have been replaced or repaired, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.
- Use only genuine parts to repair the rear bumper where the rear corner radar is located.
- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard near the rear corner radar.
- **Blind-Spot Collision-Avoidance Assist may not work properly if the bumper has been replaced, or the surroundings of the rear corner radar has been damaged or paint has been applied.**
- If a trailer, carrier, etc., is installed, it may adversely affect the performance of the rear corner radar or Blind-Spot Collision-Avoidance Assist may not operate.

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

Blind-Spot Collision-Avoidance Assist settings

Setting features



Blind-Spot Safety

With the vehicle on, select or deselect ‘Driver Assistance → Blind-Spot Safety’ from the Settings menu to set whether or not to use each function.

- If ‘Active Assist’ (or ‘SEW (Safe Exit Warning)’) is selected, Blind-Spot Collision-Avoidance Assist will warn the driver with a warning message, an audible warning, steering wheel vibration and braking assist will be applied depending on the collision risk levels.
- If ‘Warning Only’ is selected, Blind-Spot Collision-Avoidance Assist will warn the driver with a warning message, an audible warning and steering wheel vibration depending on the collision risk levels. Braking will not be assisted.
- If ‘Off’ is selected, Blind-Spot Collision-Avoidance Assist will turn off.



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

If you change the setting from 'Off' to 'Active Assist' or 'Warning Only', the warning light on the outside rearview mirror will blink for three seconds.

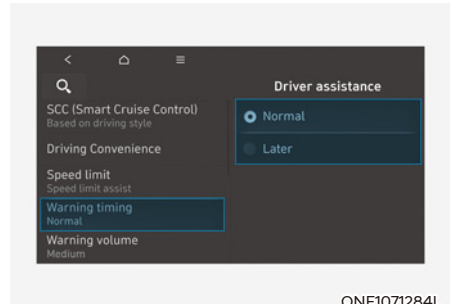
In addition, if the vehicle is turned on, when Blind-Spot Collision-Avoidance Assist is set to 'Active Assist' or 'Warning Only', the warning light on the outside rearview mirror will blink for three seconds.

WARNING

- If 'Warning Only' is selected, braking is not assisted.
- If 'Off' is selected, the driver should always be aware of the surroundings and drive safely.

Information

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

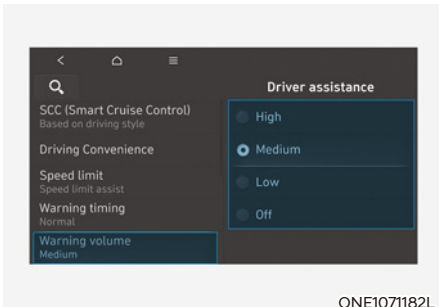


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Warning Timing

With the vehicle on, select 'Driver Assistance → Warning Timing' from the Settings menu to change the initial warning activation time for Blind-Spot Collision-Avoidance Assist.

When the vehicle is first delivered, Warning Timing is set to 'Normal'. If you change the Warning Timing, the warning time of other Driver Assistance systems may change.



Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Blind-Spot Collision-Avoidance Assist.

However, when Warning Volume is turned Off, the steering wheel vibration function will turn on if it was turned Off.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.



CAUTION

- **The setting of the Warning Timing and Warning Volume applies to all functions of Blind-Spot Collision-Avoidance Assist.**
- **Even though 'Normal' is selected for Warning Timing, if the vehicle approaches at high speed, the initial warning activation time may seem late.**
- **Select 'Late' for Warning Timing when traffic is light and when driving speed is slow.**

Blind-Spot Safety system operation

Warning and control



Vehicle detection

- To warn the driver a vehicle is detected, the warning light on the outside rearview mirror and head-up display (if equipped) will illuminate.
- Blind-Spot Collision-Avoidance Assist will operate when your vehicle speed is above 20 km/h (12 mph) and the speed of the vehicle in the blind spot area is above 10 km/h (7 mph).

Collision Warning

- Collision warning will operate when the turn signal is turned on in the direction of the detected vehicle.
- If 'Warning Only' is selected from the Settings menu, the collision warning will operate when your vehicle approaches the lane the blind spot vehicle is detected.
- To warn the driver of a collision, the warning light on the outside rearview mirror and head-up display (if equipped) will blink. At the same time, an audible warning will sound and the steering wheel will vibrate.
- When the turn signal is turned off or you move away from the lane, the collision warning will be canceled and Blind-Spot Collision-Avoidance Assist will return to vehicle detection state.



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 in the next next lane 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

- **If the driver's seat is on the left side, the collision warning may occur when you turn left. Maintain a proper distance with the vehicles in the left lane. If the driver's seat is on the right side, the collision warning may occur when you turn right. Maintain a proper distance with the vehicles in the right lane.**
- **The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the instrument cluster.**



Collision-Avoidance Assist (while driving)

- To warn the driver of a collision, the warning light on the outside rearview mirror will blink and a warning message will appear on the cluster. At the same time, an audible warning will sound, warning light on the head-up display (if equipped) will blink and the steering wheel will vibrate.
- Blind-Spot Collision-Avoidance Assist will operate when your vehicle speed is between 60~200 km/h (40~120 mph) and both lane markings of the driving lane are detected.
- Emergency braking will be assisted to help prevent collision with the vehicle in the blind spot area.

 **WARNING**

- **Collision-Avoidance Assist 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 Blind-Spot Collision-Avoidance Assist operation or changing lane, you must drive to the center of the lane. Blind-Spot Collision-Avoidance Assist will not operate if the vehicle is not driven in the center of the lane.**



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Collision-Avoidance Assist (while departing)

- To warn the driver of a collision, the warning light on the outside rearview mirror will blink and a warning message will appear on the cluster. At the same time, an audible warning will sound, warning light on the head-up display (if equipped) will blink and the steering wheel will vibrate.
- 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).
- Emergency braking will be assisted to help prevent collision with the vehicle in the blind spot area.



ONE1071185L

- 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 approximately 2 seconds.



WARNING

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

- For your safety, 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, 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 collision.
- When Blind-Spot Collision-Avoidance Assist is operating, braking control by the system 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 performance will operate normally.
- Blind-Spot Collision-Avoidance Assist does not operate in all situations or 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

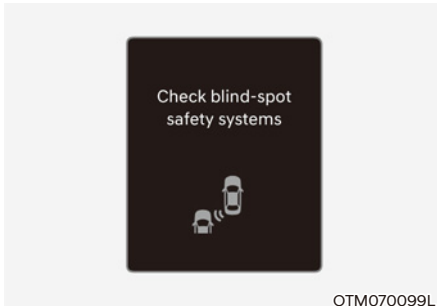


Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

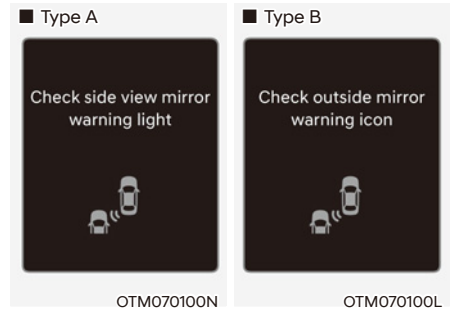
Blind-Spot Collision-Avoidance Assist malfunction and limitations

Blind-Spot Collision-Avoidance Assist malfunction



OTM070099L

When Blind-Spot Collision-Avoidance Assist is not working properly, the 'Check Blind-Spot Safety system' warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



OTM070100N

OTM070100L

When the outside rearview mirror warning light is not working properly, the 'Check side view mirror warning light' (or 'Check outside mirror warning icon') warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be 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 'Blind-spot safety system disabled. Radar blocked' warning message will appear on the cluster.

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

If Blind-Spot Collision-Avoidance Assist does not operate normally after it is removed, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

WARNING

- Even though the warning message does not appear on the cluster, Blind-Spot Collision-Avoidance Assist may not properly operate.
- Blind-Spot Collision-Avoidance Assist may not properly operate in an area (e.g. open terrain) where any substance 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 a trailer, carrier, etc., or remove the trailer, carrier, etc., to use Blind-Spot Collision-Avoidance Assist.

Limitations of Blind-Spot Collision-Avoidance Assist

Blind-Spot Collision-Avoidance Assist may not operate normally, or Blind-Spot Collision-Avoidance Assist 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 (or motorway) 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 large 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 or carrier 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 normally, 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:

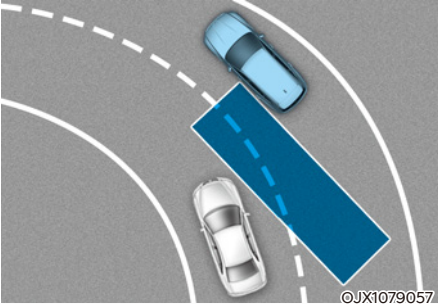
- The vehicle severely vibrates while driving over a bumpy road, uneven road or concrete patch
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- The tire pressure is low or a tire is damaged
- The braking system has been modified
- The vehicle makes abrupt lane changes

Information

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

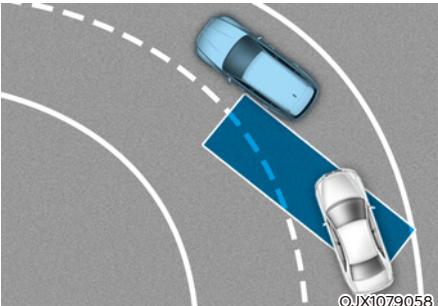
 **WARNING**

- 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.

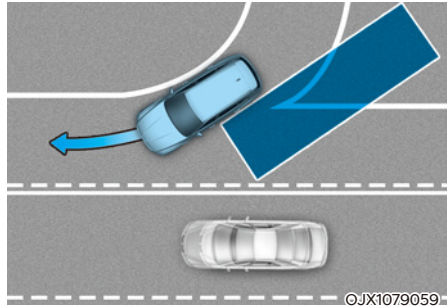
Always pay attention to road and driving conditions while driving.



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.

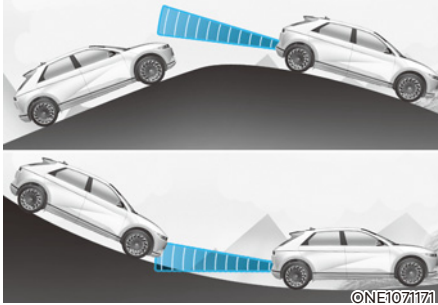
- Driving where the road is merging/dividing



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.

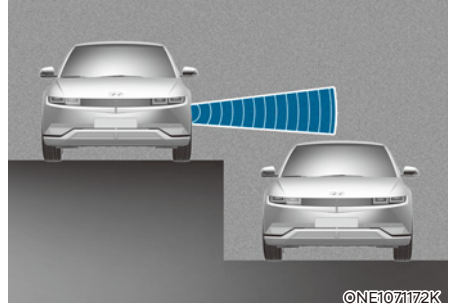
- Driving on a sloped road



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 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.).

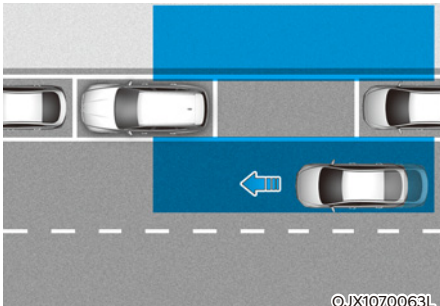
Always pay attention to road and driving conditions while driving.



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 normally if interfered by strong electromagnetic waves.
- **Blind-Spot Collision-Avoidance Assist** may not operate for 15 seconds after the vehicle is started, or the front view camera or rear corner radars are initialized.

SAFE EXIT WARNING (SEW) (IF EQUIPPED)



After the vehicle stops, when an approaching vehicle from the rear area is detected as soon as a passenger opens a door, Safe Exit Warning will warn the driver with a warning message and an audible warning to help prevent a collision.

CAUTION

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

Detecting sensor



[1] : Rear corner radar

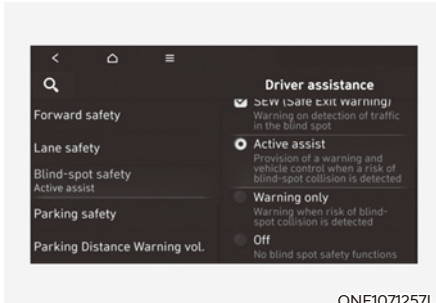
Refer to the picture above for the detailed location of the detecting sensors.

CAUTION

For more details on the precautions of the rear corner radars, refer to “Blind-Spot Collision-Avoidance Assist (BCA)” section in this chapter.

Safe Exit Warning settings

Setting features



Safe Exit Warning

With the vehicle on, select 'Driver Assistance → Blind-Spot Safety → Safe Exit Warning' from the Settings menu to turn on Safe Exit Warning and deselect to turn off the function.



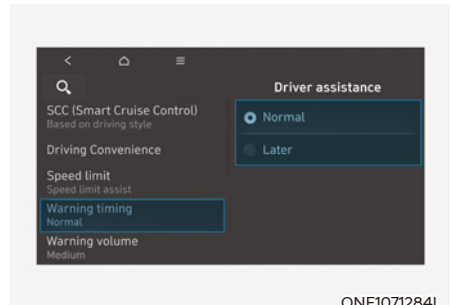
WARNING

The driver should always be aware of unexpected and sudden situations from occurring. If 'Safe Exit Warning' is deselected, Safe Exit Warning cannot assist you.



Information

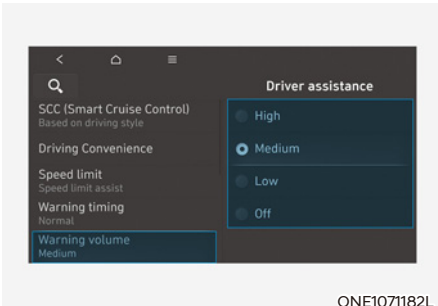
If the vehicle is restarted, Safe Exit Warning will maintain the last setting.



Warning Timing

With the vehicle on, select 'Driver Assistance → Warning Timing' from the Settings menu to change the initial warning activation time for Safe Exit Warning.

When the vehicle is first delivered, Warning Timing is set to 'Normal'. If you change the Warning Timing, the warning time of other Driver Assistance systems may change.



Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Safe Exit Warning.

However, even if 'Off' is selected, the Warning Volume of Safe Exit Warning will not turn off but the volume will sound as 'Low'.

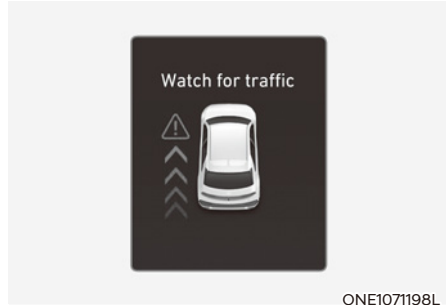
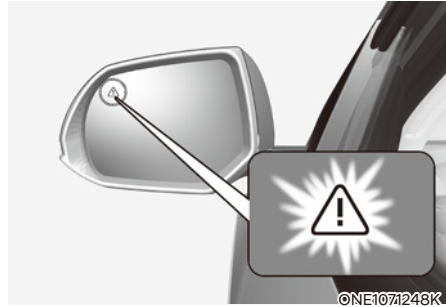
If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

CAUTION

- **The setting of the Warning Timing and Warning Volume applies to all functions of the Safe Exit Warning.**
- **Even though 'Normal' is selected for Warning Timing, if the vehicles approaches at high speed from the rear, the initial warning activation time may seem late.**
- **Select 'Late' for Warning Timing when traffic is light and when driving speed is slow.**

Safe Exit Warning operation

Safe Exit Warning



Collision warning when exiting vehicle

- When an approaching vehicle from the rear is detected at the moment a door is opened, the 'Watch for traffic' warning message will appear on the cluster, and an audible warning will sound.
- Safe Exit Warning will warn the driver when your vehicle speed is below 3 km/h (2 mph), and the speed of the approaching vehicle from the rear is above 6 km/h (4 mph).



WARNING

Take the following precautions when using Safe Exit Warning:

- For your safety, 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, Safe Exit Warning's warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Safe Exit Warning if the surrounding is noisy.
- Safe Exit Warning does not operate in all situations or cannot prevent all collisions.
- Safe Exit Warning 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 accidents that occurs while exiting the vehicle. Always check the surroundings before you exit the vehicle.
- Never deliberately operate Safe Exit Warning. Doing so may lead to serious injury or death.
- Safe Exit Warning does not operate if there is a problem with Blind-Spot Collision-Avoidance Assist. The warning message of Blind-Spot Collision-Avoidance Assist will appear when:
 - Blind-Spot Collision-Avoidance Assist sensor or the sensor surrounding is polluted or covered
 - Blind-Spot Collision-Avoidance Assist fails to warn passengers or falsely warn passengers



Information

After the vehicle is turned off, Safe Exit Warning operates approximately for 3 minutes, but turns off immediately if the doors are locked.

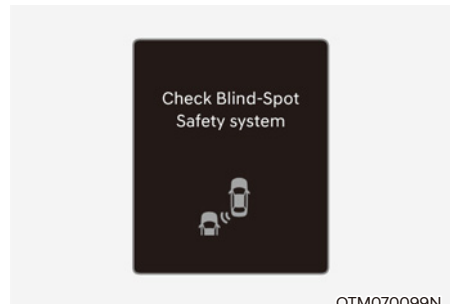


Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

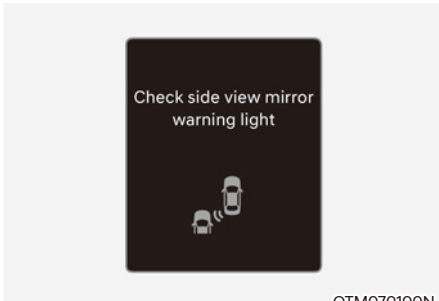
Safe Exit Warning malfunction and limitations

Safe Exit Warning malfunction



OTM070099N

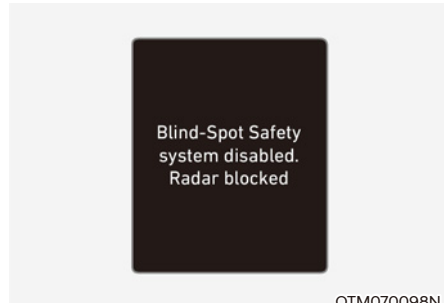
When Safe Exit Warning is not working properly, the 'Check Blind-Spot Safety system' warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



OTM070100N

When the outside rearview mirror warning light is not working properly, the 'Check side view mirror warning light' (or 'Check outside mirror warning icon') warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

Safe Exit Warning disabled



OTM070098N

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 Warning.

If this occurs, the 'Blind-Spot Safety system disabled. Radar blocked' warning message will appear on the cluster.

Safe Exit Warning will operate normally when such foreign material or trailer, etc., is removed, and then the vehicle is restarted.

If Safe Exit Warning does not operate normally after it is removed, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

**WARNING**

- Even though the warning message does not appear on the cluster, Safe Exit Warning may not properly operate.
- Safe Exit Warning may not properly operate in an area (for example, open terrain) where any substance 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 Safe Exit Warning to install a trailer, carrier, etc., or remove the trailer, carrier, etc., to use Safe Exit Warning.

Limitations of Safe Exit Warning

Safe Exit Warning may not operate normally, 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

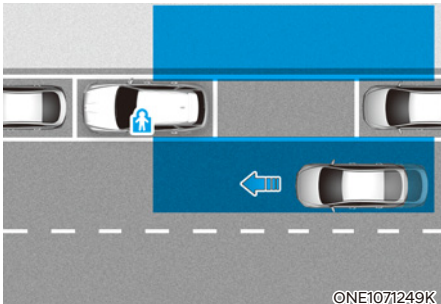
**Information**

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

**WARNING**

- Safe Exit Warning may not operate normally if interfered by strong electromagnetic waves.
- Safe Exit Warning may not operate for 3 seconds after the vehicle is started, or the rear corner radars are initialized.

SAFE EXIT ASSIST (SEA) (IF EQUIPPED)



After the vehicle stops, when an approaching vehicle from the rear area is detected as soon as a passenger opens a door, Safe Exit Assist will warn the driver with a warning message and an audible warning to help prevent a collision.



In addition, when the electronic child safety lock 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.

Detecting sensor



[1] : Rear corner radar

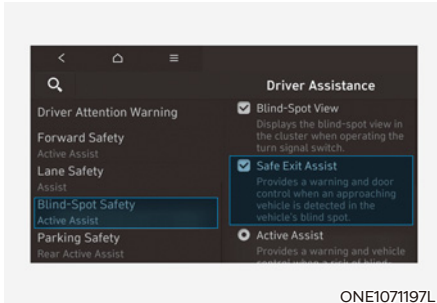
Refer to the picture above for the detailed location of the detecting sensors.

CAUTION

For more details on the precautions of the rear corner radars, refer to “Blind-Spot Collision Assist (BCA)” section in this chapter.

Safe Exit Assist settings

Setting features



Safe Exit Assist

With the vehicle on, select 'Driver Assistance → Blind-Spot Safety → Safe Exit Assist' from the Settings menu to turn on Safe Exit Assist and deselect to turn off the function.



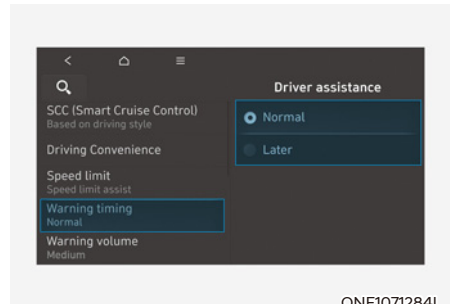
WARNING

The driver should always be aware of unexpected and sudden situations from occurring. If 'Safe Exit Assist' is deselected, Safe Exit Assist cannot assist you.



Information

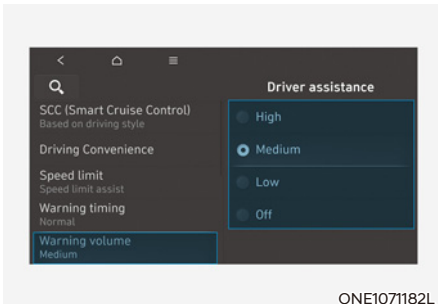
If the vehicle is restarted, Safe Exit Assist will maintain the last setting.



Warning Timing

With the vehicle on, select 'Driver Assistance → Warning Timing' from the Settings menu to change the initial warning activation time for Safe Exit Assist.

When the vehicle is first delivered, Warning Timing is set to 'Normal'. If you change the Warning Timing, the warning time of other Driver Assistance systems may change.



Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume 'High', 'Medium', 'Low' or 'Off' for Safe Exit Assist.

However, even if 'Off' is selected, the Warning Volume of Safe Exit Assist will not turn off but the volume will sound as 'Low'.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

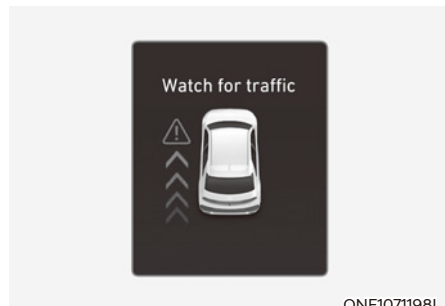


CAUTION

- **The setting of the Warning Timing and Warning Volume applies to all functions of the Safe Exit Assist.**
- **Even though 'Normal' is selected for Warning Timing, if the vehicles approaches at high speed from the rear, the initial warning activation time may seem late.**
- **Select 'Late' for Warning Timing when traffic is light and driving speed is slow.**

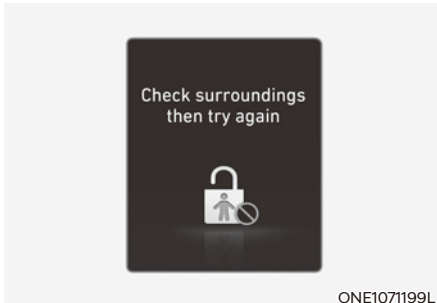
Safe Exit Assist operation

Warning and control



Collision warning when exiting vehicle

- When an approaching vehicle from the rear is detected at the moment a door is opened, the 'Watch for traffic' warning message will appear on the cluster, and an audible warning will sound.
- Safe Exit Assist will warn the driver when your vehicle speed is below 3 km/h (2 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 outside rearview mirror will blink and the 'Check surroundings then try again' warning message will appear on the cluster.
- Safe Exit Assist will warn the driver when vehicle speed is below 3 km/h (2 mph) and the speed of the approaching vehicle from the rear is above 6 km/h (4 mph).
- For more details on electric child safety lock button, refer to "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.



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 is displayed or audible warning is generated, Safe Exit Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Safe Exit Assist if the surrounding is noisy.
- Safe Exit Assist does not operate in all situations or 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 accidents that occurs while exiting the vehicle. Always check the surroundings before you exit the vehicle.
- Never deliberately operate **Safe Exit Assist**. Doing so may lead to serious injury or death.
- **Safe Exit Assist** does not operate if there is a problem with **Blind-Spot Collision-Avoidance Assist**. The warning message of **Blind-Spot Collision-Avoidance Assist** will appear when:
 - **Blind-Spot Collision-Avoidance Assist** sensor or the sensor surrounding is polluted or covered
 - **Blind-Spot Collision-Avoidance Assist** fails to warn passengers or falsely warn passengers

i Information

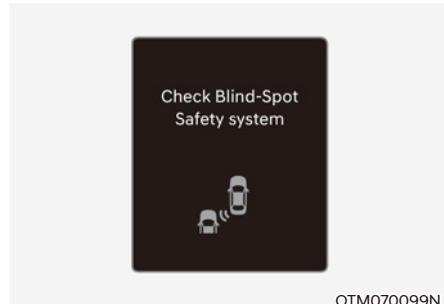
After the vehicle is turned off, **Safe Exit Assist** operates approximately for 3 minutes, but turns off immediately if the doors are locked.

i Information

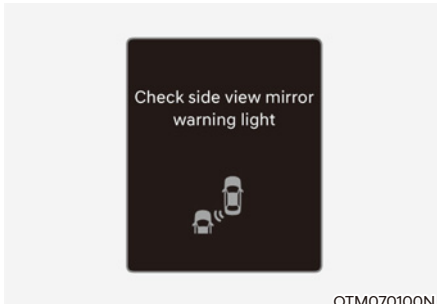
The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Safe Exit Assist malfunction and limitations

Safe Exit Assist malfunction



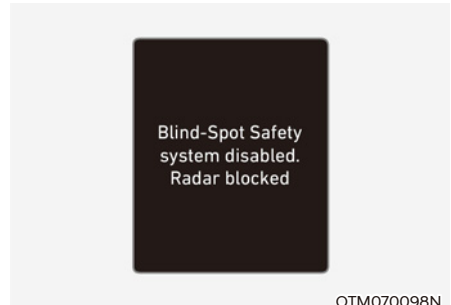
When **Safe Exit Assist** is not working properly, the 'Check Blind-Spot Safety system' warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



OTM070100N

When the outside rearview mirror warning light is not working properly, the 'Check side view mirror warning light' (or 'Check outside mirror warning icon') warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

Safe Exit Assist disabled



OTM070098N

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 'Blind-Spot Safety system disabled. Radar blocked' warning message will appear on the cluster.

Safe Exit Assist will operate normally when such foreign material or trailer, etc., is removed, and then the vehicle is restarted.

If Safe Exit Assist does not operate normally after it is removed, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



WARNING

- Even though the warning message does not appear on the cluster, Safe Exit Assist may not properly operate.
- Safe Exit Assist may not properly operate in an area (for example, open terrain) where any substance 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.



WARNING

- Safe Exit Assist may not operate normally if interfered by strong electromagnetic waves.
- Safe Exit Assist may not operate for 3 seconds after the vehicle is started, or the rear corner radars are initialized.



CAUTION

Turn off Safe Exit Assist to install a trailer, carrier, etc., or remove the trailer, carrier, etc., to use Safe Exit Assist.

Limitations of Safe Exit Assist

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

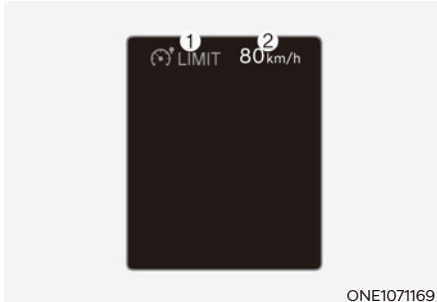
- Getting out of the vehicle where trees or grass are overgrown
- Getting out of the vehicle where the road is wet
- The approaching vehicle is very fast or very slow



Information

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

MANUAL SPEED LIMIT ASSIST (MSLA)

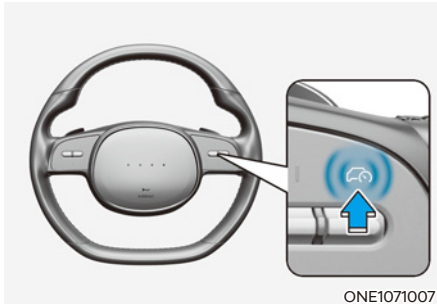


- (1) Speed Limit indicator
- (2) Set speed

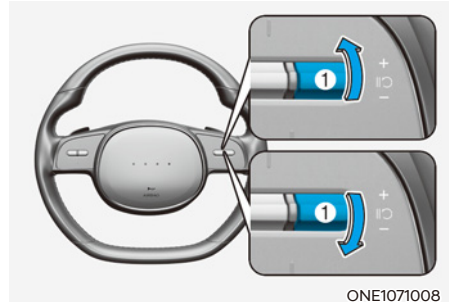
You can set the speed limit when you do not want to drive over a specific speed. If you drive over the preset speed limit, Manual Speed Limit Assist will operate (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

Manual Speed Limit Assist operation

To set speed limit

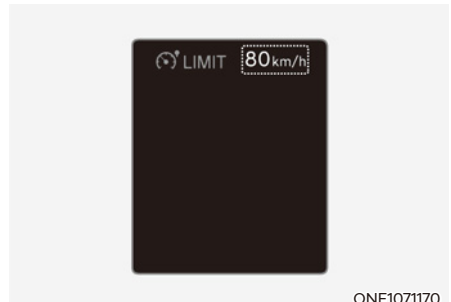


1. Press and hold Driving Assist (🚦) button at the desired speed. The Speed Limit (🚦) LIMIT indicator will illuminate on the cluster.



2. Push the + switch (1) up or - switch (1) down, and release it at the desired speed.

Push the + switch (1) up or - switch (1) 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.

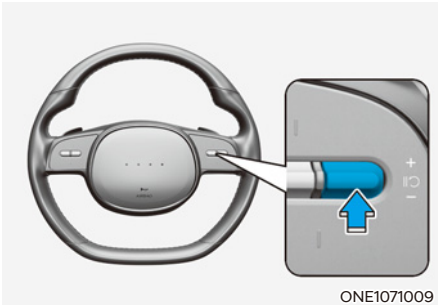
If you would like to drive over the preset speed limit, depress the accelerator pedal beyond the pressure point to activate the kickdown mechanism.

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

i Information

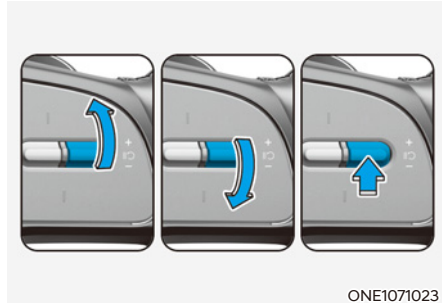
When the accelerator pedal is not depressed beyond the pressure point, vehicle speed will maintain within the speed limit.

To temporarily pause Manual Speed Limit Assist



Push the ||○ switch to temporarily pause the set speed limit. The set speed limit will turn off but the Speed Limit (S) LIMIT indicator will stay on.

To resume Manual Speed Limit Assist

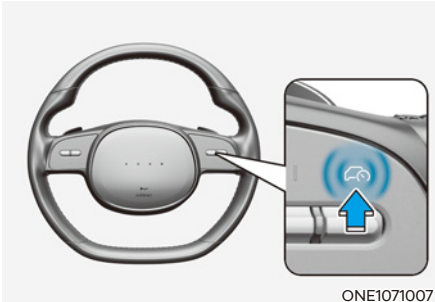


To resume Manual Speed Limit Assist after the function was paused, push the +, -, ||○ switch.

If you push the + switch (1) up or - switch (1) down, vehicle speed will be set to the current speed on the cluster.

If you push the ||○ switch, vehicle speed will resume to the preset speed.

To turn 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 country.
- 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 should always be aware of unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.

Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

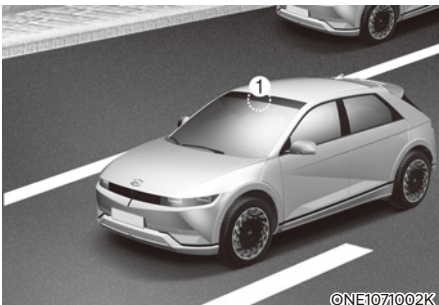
INTELLIGENT SPEED LIMIT ASSIST (ISLA) (IF EQUIPPED)

Intelligent Speed Limit Assist uses information from the detected road sign and navigation system to inform the driver of the speed limit of the current road. Also, Intelligent Speed Limit Assist helps the driver to maintain within the speed limit of the road.

CAUTION

- Intelligent Speed Limit Assist may not operate properly if the function is used in other countries.
- Update your navigation regularly to ensure that Intelligent Speed Limit Assist works properly.

Detecting sensor



[1]: Front view camera

Refer to the picture above for the detailed location of the detecting sensor.

CAUTION

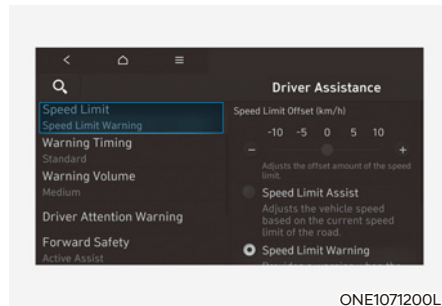
For more details on the precautions of the front view camera, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.

Information

If the navigation system is available, the information from the navigation system is used along with the road sign information detected by the front view camera.

Intelligent Speed Limit Assist settings

Setting features



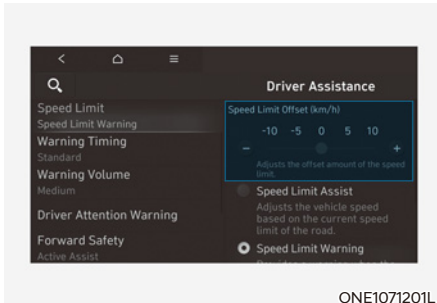
Speed Limit

With the vehicle on, select or deselect ‘Driver Assistance → Speed Limit’ from the Settings menu to set whether or not to use each function.

- If ‘Speed Limit Assist’ is selected, Intelligent Speed Limit Assist will inform the driver of 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.
- If ‘Speed Limit Warning’ is selected, 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.
- If ‘Off’ is selected, Intelligent Speed Limit Assist will turn off.

CAUTION

If ‘Speed Limit Warning’ is selected, Intelligent Speed Limit Assist will not inform the driver to adjust set speed.



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Speed Limit Offset

With the vehicle on, when 'Driver Assistance → Speed Limit → Speed Limit Offset' is selected, the Speed Limit Offset can be changed. Speed Limit Warning and Speed Limit Assist will operate by applying the Speed Limit Offset setting to the detected speed limit.



WARNING

- For your safety, change the Settings after parking the vehicle at a safe location.
- 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'.
- Speed Limit Warning function warns the driver when driving speed exceeds the speed at which the set Offset is added to speed limit. If you want Speed Limit Warning to warn you immediately when the driving speed exceeds the speed limit, adjust the offset to '0'.



Information

The setting of 'Speed Offset' is not reflected in Navigation-based Smart Cruise Control (NSCC).

Intelligent Speed Limit Assist operation

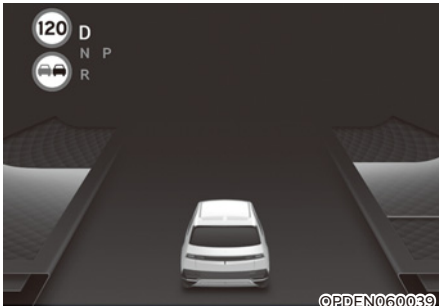
Warning and control

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

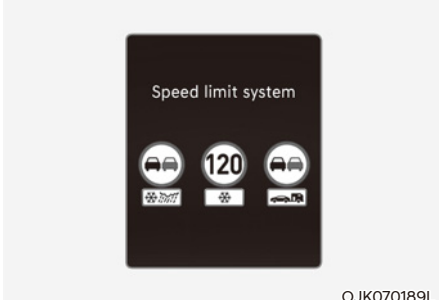


Information

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".



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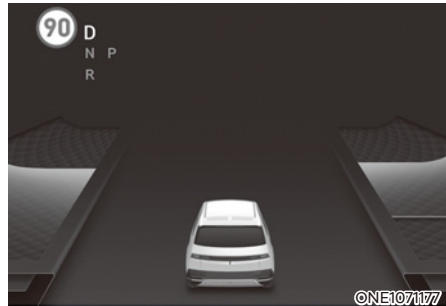
OJK070189L

Displaying speed limit

Speed limit information is displayed on the instrument cluster.

i Information

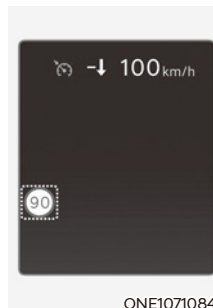
- If speed limit information of the road cannot be recognized, '---' sign will be displayed. Please refer to "Limitations of Intelligent Speed Limit Assist" if the road signs are difficult to recognize.
- Supplementary sign displayed under the speed limit or overtaking restriction sign means the conditions under which the signs must be followed. If the supplementary sign is not recognized, it will be displayed as blank.



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Warning overspeed

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



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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.

WARNING

- If the Offset is adjusted over '0', the set speed will change to a higher speed than the speed limit of the road. 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 unit in the instrument cluster set by the driver. If the speed unit is set to a unit other than the speed unit used in your country, Intelligent Speed Limit Assist may not operate properly.

Information

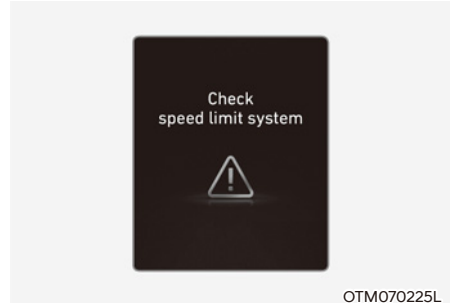
- For more details on Manual Speed Limit Assist operation, refer to “Manual Speed Limit Assist (MSLA)” section in this chapter.
- For more details on Smart Cruise Control operation, refer to “Smart Cruise Control (SCC)” section in this chapter.

Information


The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Intelligent Speed Limit Assist malfunction and limitations

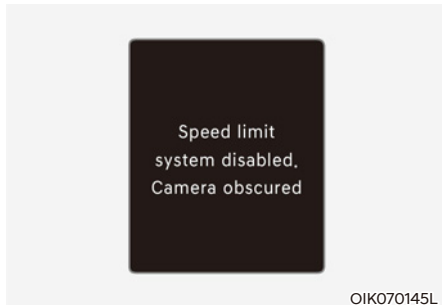
Intelligent Speed Limit Assist malfunction



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When Intelligent Speed Limit Assist is not working properly, the 'Check speed limit system' warning message will appear on the cluster for several seconds, and the master () warning light will illuminate on the cluster. If this occurs, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

Intelligent Speed Limit Assist 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 Intelligent Speed Limit Assist. If this occurs, the 'Speed limit system disabled. Camera obscured' warning message will appear on the cluster.

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

If Intelligent Speed Limit Assist does not operate normally after it is removed, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



WARNING

- Even though the warning message or warning light does not appear on the cluster, Intelligent Speed Limit Assist may not operate properly.
- If the detecting sensor is contaminated immediately after starting the vehicle, Intelligent Speed Limit Assist may not operate properly.

Limitations of Intelligent Speed Limit Assist

Intelligent Speed Limit Assist may not operate normally, 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
 - A road sign near the road you are driving is detected
- The road signs do not conform to the standard
 - The text or picture 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 in the street signals or other signs as the speed limit
- 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
- Headlamps are not used or the brightness of the headlamps 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 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
- There is an error in the navigation map information or GPS information
- The driver is not driving along the navigation guide route
- Driving on a newly opened road

Information

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

WARNING

- **Intelligent Speed Limit Assist is a supplemental function that helps the driver to 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 country.**

DRIVER ATTENTION WARNING (DAW) (IF EQUIPPED)

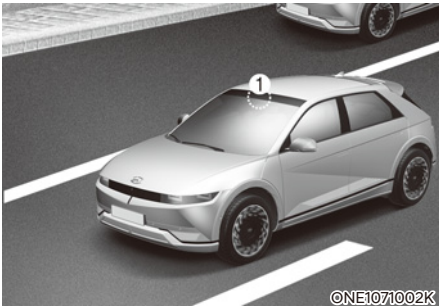
Basic function

Driver Attention Warning will help determine the driver's attention level by analyzing driving pattern and driving time while vehicle is being driven. Driver Attention Warning will recommend a break when the driver's attention level falls below a certain level.

Leading vehicle departure alert function

Leading Vehicle Departure Alert function will inform the driver when the front vehicle departs from a stop.

Detecting sensor



[1]: Front view camera

The front view camera is used as a detecting sensor to detect driving patterns and front vehicle departure while vehicle is being driven.

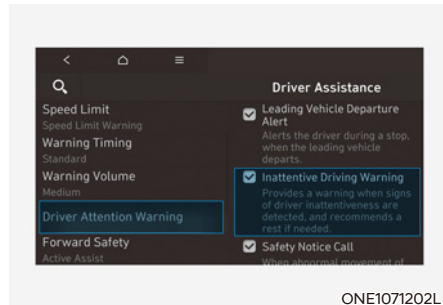
Refer to the picture above for the detailed location of the detecting sensor.

CAUTION

- Always keep the front view camera in good condition to maintain optimal performance of Driver Attention Warning.
- For more details on the precautions of the front view camera, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.

Driver Attention Warning settings

Setting features



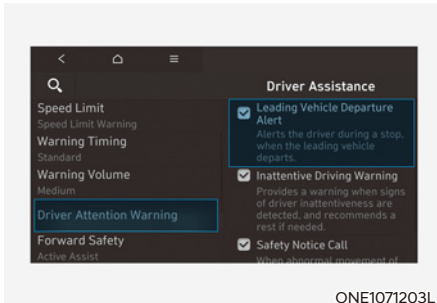
Driver Attention Warning

With the vehicle on, select or deselect ‘Driver Assistance → Driver Attention Warning’ from the Settings menu to set whether or not to use each function.

- If ‘Inattentive Driving Warning’ is selected, Driver Attention Warning will inform the driver the driver's attention level and will recommend taking a break when the level falls below a certain level.

Information

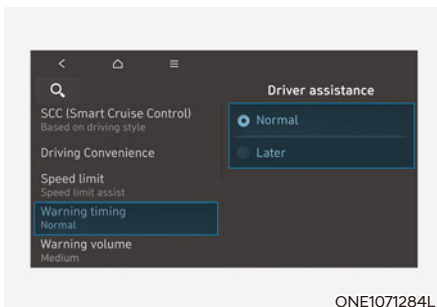
Whenever the vehicle is turned on, Inattentive Driving Warning will always turn on. (For Europe, Australia, Russia)



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Leading Vehicle Departure Alert

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



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Warning Timing

With the vehicle on, select 'Driver Assistance → Warning Timing' from the Settings menu to change the initial warning activation time for Driver Attention Warning.

When the vehicle is first delivered, Warning Timing is set to 'Normal'. If you change the Warning Timing, the warning time of other Driver Assistance systems may change.



Information

If the vehicle is restarted, Warning Timing will maintain the last setting.

Driver Attention Warning operation

Basic function

Display and warning

The basic function of Driver Attention Warning is to inform the driver the 'Attention Level' and to warn the driver 'Consider taking a break'.

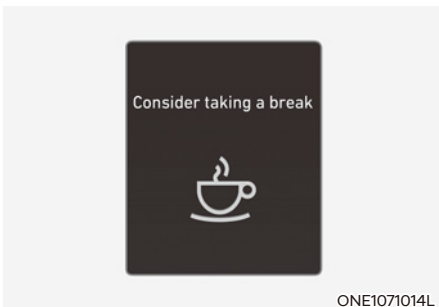
Attention level



- The driver can monitor his/her driving conditions on the cluster.
 - When the 'Inattentive Driving Warning' is deselected from the Settings menu, 'System Off' is displayed.
 - Driver Attention Warning will operate when vehicle speed is between 0~210 km/h (0~130 mph).
 - When vehicle speed is not within the operating speed, the message 'Standby' (or 'Disabled') will be displayed.

- The driver's attention level is displayed on the scale of 1 to 5. The lower the level is, the more inattentive the driver is.
- The level decreases when the driver does not take a break for a certain period of time.

Taking a break



- The 'Consider taking a break' message will appear on the cluster and an audible warning will sound to suggest that the driver take a break, when the driver's attention level is below 1.
- Driver Attention Warning will not suggest a break when the total driving time is shorter than 10 minutes or 10 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.

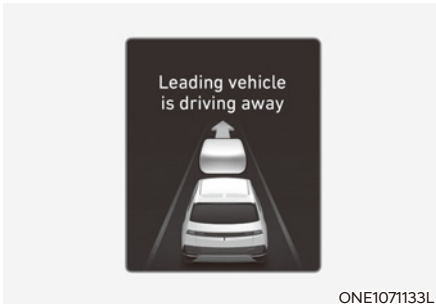
CAUTION

- **Driver Attention Warning may suggest a break depending on the driver's driving pattern or habits, even if the driver doesn't feel fatigued.**
- **Driver Attention Warning is a supplemental function and may not be able to determine whether the driver is inattentive.**
- **The 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 details on setting the functions in the infotainment system, refer to "Vehicle Settings" section in chapter 4.**
- **Driver Attention Warning will reset the last break time to 00:00 in the following situations:**
 - **The vehicle is turned off**
 - **The driver unfastens the seat belt and opens the driver's door**
 - **The vehicle is stopped for more than 10 minutes**
- **When the driver resets Driver Attention Warning, the last break time is set to 00:00 and the driver's attention level is set to High.**

Leading Vehicle Departure Alert function



When the front vehicle departs from a stop, Leading Vehicle Departure Alert will inform the driver by displaying the 'Leading vehicle is driving away' (or 'Leading vehicle is driving on') message on the 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 should hold the responsibility to safely drive and control the vehicle.

CAUTION

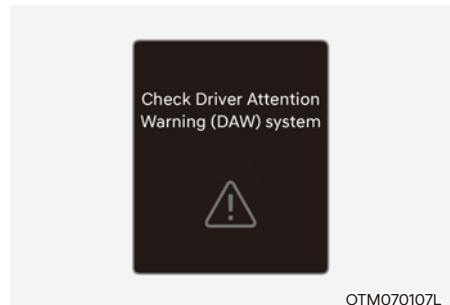
- Leading Vehicle Departure Alert is a supplemental function and may not alert the driver whenever the front vehicle departs from a stop.
- Always check the front of the vehicle and road conditions before departure.


Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Driver Attention Warning malfunction and limitations

Driver Attention Warning malfunction



When Driver Attention Warning is not working properly, the 'Check Driver Attention Warning (DAW) system' warning message will appear on the cluster for several seconds, and the master () warning light will illuminate on the cluster. If this occurs, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

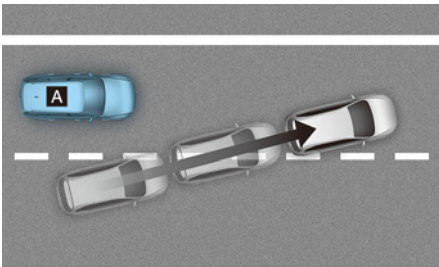
Limitations of Driver Attention Warning

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

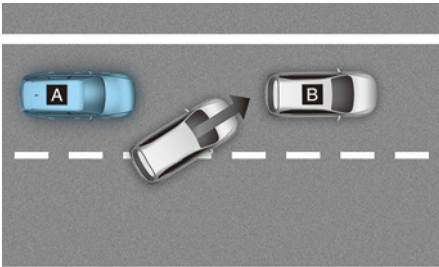
- The vehicle is driven violently
- The vehicle intentionally crosses over lanes frequently
- The vehicle is controlled by Driver Assistance system, such as Lane Keeping Assist

Leading vehicle departure alert function

- When the vehicle cuts in



©ADAS021

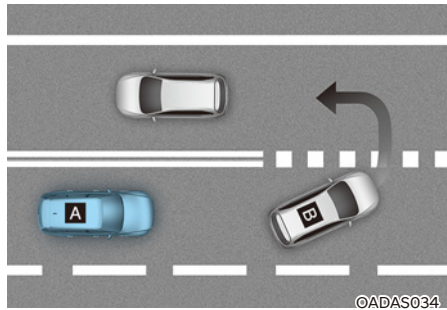


©ADAS022

[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

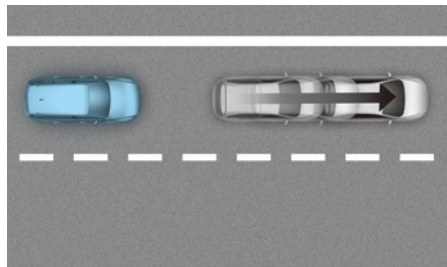


©ADAS034

[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



©ADAS024

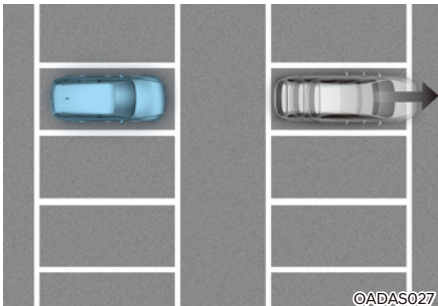
If the vehicle in front abruptly departs, Leading Vehicle Departure Alert may not operate properly.

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



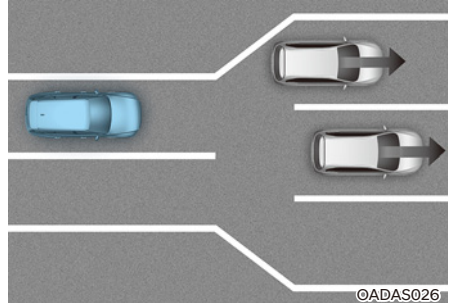
If there is a pedestrian(s) or bicycle(s) in between you and the vehicle in front, Leading Vehicle Departure Alert may not operate properly.

- 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 tollgate or intersection, etc.

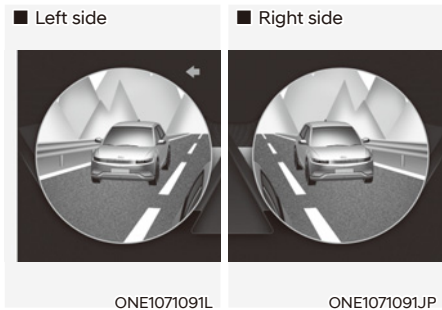


If you pass a tollgate or intersection with lots of vehicles or you drive where lanes are merged or divided frequently, Leading Vehicle Departure Alert may not operate properly.

i Information

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

BLIND-SPOT VIEW MONITOR (BVM) (IF EQUIPPED)



Blind-Spot View Monitor displays the rear blind spot area of the vehicle in the cluster when the turn signal is turned on to help safely change lanes.

Detecting sensor



[1], [2]: Surround-side view camera
(camera located at bottom of the mirror)

Refer to the picture above for the detailed location of the detecting sensors.

Blind-Spot View Monitor settings

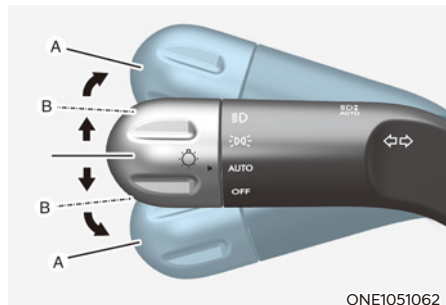
Setting features

Blind-Spot View

With the vehicle on, select 'Driver Assistance → Blind-Spot Safety → Blind-Spot View' from the Settings menu to turn on Blind-Spot View Monitor and deselect to turn off the function.

Blind-Spot View Monitor operation

Operating switch



Turn signal lever

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 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

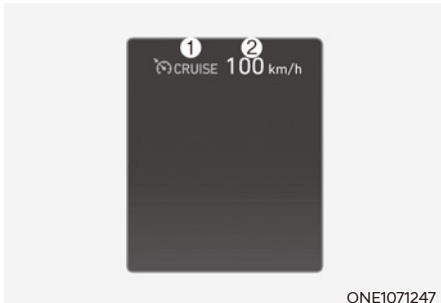
When Blind-Spot View Monitor is not working properly, or the cluster display flickers, or the camera image does not display normally, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



WARNING

- **The image shown on the 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 normally.**

CRUISE CONTROL (CC) (IF EQUIPPED)



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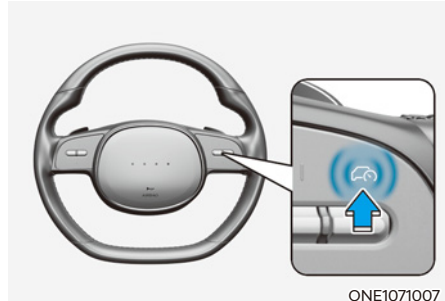
- (1) Cruise indicator
- (2) Set speed

Cruise Control will allow you to drive at speeds above 30 km/h (20 mph) without depressing the accelerator pedal.



Cruise Control operation

Operating conditions

1. Accelerate to the desired speed, which must be more than 30 km/h (20 mph).

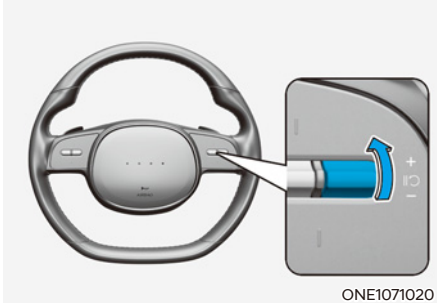


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2. Press the Driving Assist () button at the desired speed. The set speed and Cruise () indicator will illuminate on the cluster.
3. Release the accelerator pedal.
Vehicle speed will maintain the set speed even when the accelerator pedal is not depressed.

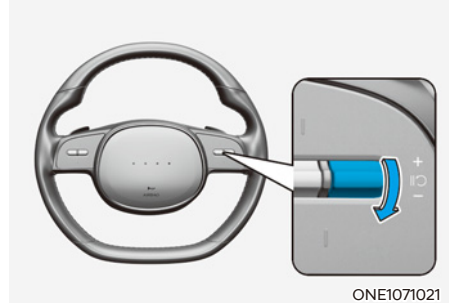
Information

On a steep slope, the vehicle may slightly slow down or speed up while driving uphill or downhill.

To increase speed

- Push the + switch up and release it immediately. The cruising 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 cluster. The cruising speed will increase to the nearest multiple of five in mph (multiple of ten) at first, and then 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.

To decrease speed

- Push the - switch down and release it immediately. The cruising 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 cruising speed will decrease to the nearest multiple of five in mph (multiple of ten) at first, and then 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.

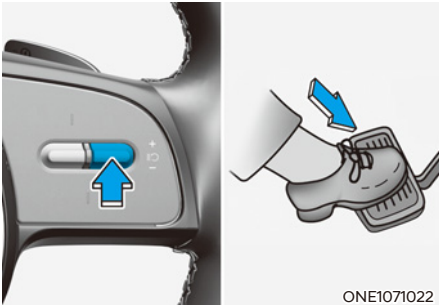
To temporarily accelerate

If you want to speed up temporarily when Cruise Control is on, depress the accelerator pedal.

To return to the set speed, take your foot off the accelerator pedal.

If you push the + switch up or - switch down at increased speed, the cruising speed will be set to the current increased speed.

To temporarily pause Cruise Control



Cruise Control will be paused when:

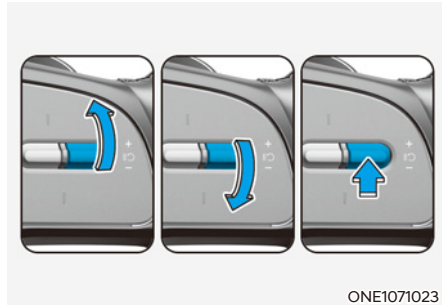
- Depressing the brake pedal.
- Pushing the ||○ button.
- Shifting the gear to N (Neutral).
- Decreasing vehicle speed to less than approximately 30 km/h (20 mph).
- Increasing vehicle speed to more than approximately 190 km/h (120 mph)
- Operating the electronic parking brake system (EPB).
- ESC (Electronic Stability Control) is operating.

The set speed will turn off but the Cruise (CRUISE) indicator will stay on.

NOTICE

If Cruise Control pauses during a situation that is not mentioned, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

To resume Cruise Control



Push the +, - switch or ||○ button.

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

If you push the ||○ button, vehicle speed will resume to the preset speed.

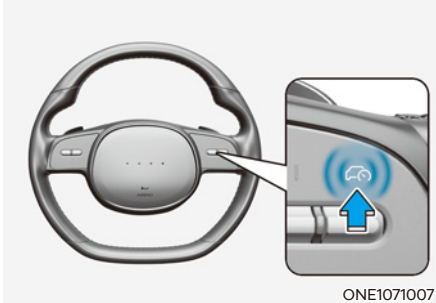
Vehicle speed must be above 30 km/h (20 mph) for the function to resume.



WARNING

Check the driving condition before using the ||○ button. Driving speed may sharply increase or decrease when you press the ||○ button.

To turn off Cruise Control



Press the Driving Assist (🚦) button to turn Cruise Control off. The Cruise (🚦CRUISE) indicator will go off.

Always press the Driving Assist (🚦) button to turn Cruise Control off when not in use.

i Information

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

⚠ WARNING

Take the following precautions when using Cruise Control:

- Always set the vehicle speed to the speed limit in your country.
- Keep Cruise Control off when the function is not in use, to avoid inadvertently setting a speed. Check that the Cruise (🚦CRUISE) indicator is off.
- Cruise Control does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and should always be aware of unexpected and sudden situations from occurring.
- Always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.
- Do not use Cruise Control when it may be unsafe to keep the vehicle at a constant speed:
 - When driving in heavy traffic, or when traffic conditions make it difficult to drive at a constant speed
 - When driving on rainy, icy, or snow-covered roads
 - When driving on hilly or windy roads
 - When driving in windy areas
 - When driving with limited view (possibly due to bad weather, such as fog, snow, rain and sandstorm)
- Do not use Cruise Control when towing a trailer.

SMART CRUISE CONTROL (SCC) (IF EQUIPPED)

Smart Cruise Control is designed to detect the vehicle ahead and help maintain the desired speed and minimum distance between the vehicle ahead.

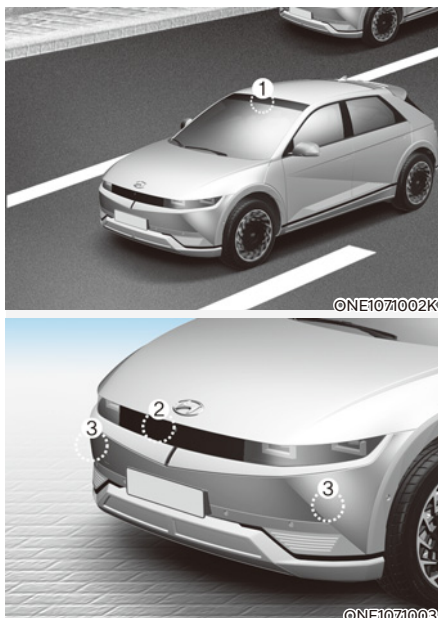
Overtaking Acceleration Assist

While Smart Cruise Control is operating, if the function judges that the driver is determined to overtake the vehicle in front, acceleration will be assisted.

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.

Detecting sensor



[1]: Front view camera, [2]: Front radar
[3] : Front corner radar

The front view camera and front radar are used as a detecting sensor to detect front vehicles.

Refer to the picture above for the detailed location of the detecting sensor.

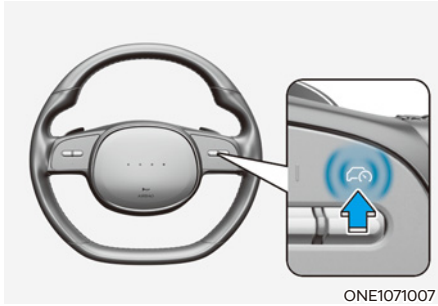
CAUTION

Always keep the front view camera and front radar in good condition to maintain optimal performance of Smart Cruise Control.

For more details on the precautions of the front view camera and front radar, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.

Smart Cruise Control settings

Setting features

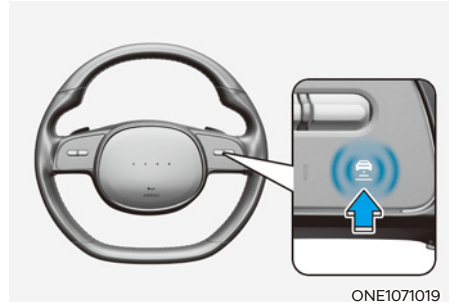


To turn on Smart Cruise Control

- Press the Driving Assist (🚗) button to turn on Smart Cruise Control. The speed will be set to the current speed on the 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.

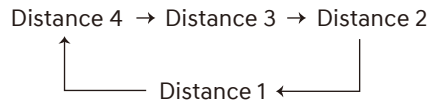
i Information

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



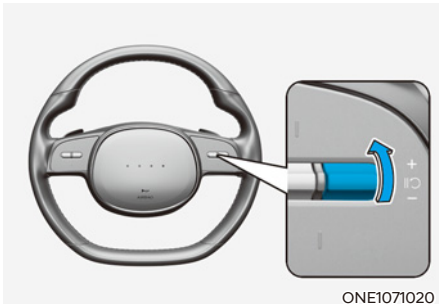
To set vehicle distance

Each time the button is pressed, the headway changes as follows:



i Information

- If you drive at 90 km/h (56 mph), the distance is maintained as follows:
 - Distance 4 - approximately 52.5 m (172 ft.)
 - Distance 3 - approximately 40 m (130 ft.)
 - Distance 2 - approximately 32.5 m (106 ft.)
 - Distance 1 - approximately 25 m (82 ft.)
- The distance is set to the last set distance when the vehicle is restarted, or when Smart Cruise Control was temporarily canceled.

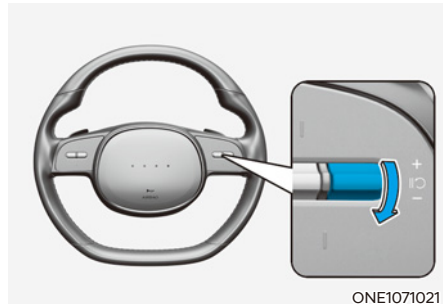


To increase speed

- Push the + switch up and release it immediately. The cruising 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 cluster. The cruising speed will increase by 10 km/h or 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 set the speed to 180 km/h (110 mph).

WARNING

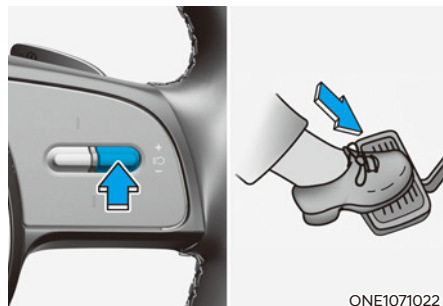
Check the driving condition before using the + switch. Driving speed may sharply increase when you push up and hold the + switch.



To decrease speed

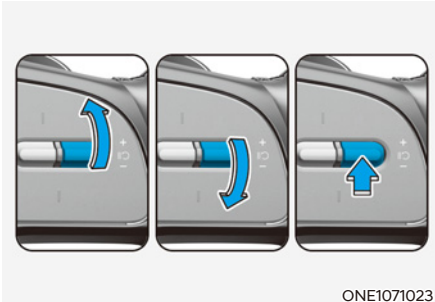
- Push the - switch down and release it immediately. The cruising speed will decrease by 1 km/h (1 mph) each time the switch is operated in this manner.
- Push the - switch down and hold it while monitoring the set speed on the cluster. The cruising speed will decrease by 10 km/h or 5 mph each time the switch is operated in this manner.

Release the switch at the speed you want to maintain. You can set the speed to 30 km/h (20 mph).



To temporarily cancel Smart Cruise Control

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



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To resume Smart Cruise Control

To resume Smart Cruise Control after the function was canceled, push the +, - or ||○ switch.

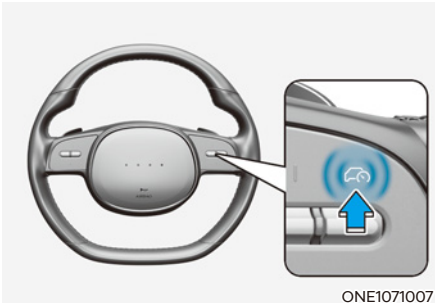
If you push the + switch up or - switch down, vehicle speed will be set to the current speed on the cluster.

If you push the ||○ switch, vehicle speed will resume to the preset speed.



WARNING

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



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To turn off Smart Cruise Control

Press the Driving Assist (⤵) button to turn Smart Cruise Control off.

i 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.

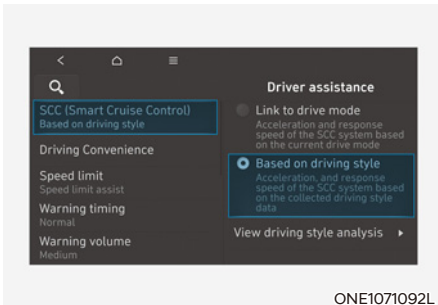
Based on Drive Mode

Smart Cruise Control will change acceleration based on the drive mode selected from Drive Mode Integrated Control system. Refer to the following chart.

Drive mode	Smart Cruise Control
SNOW	Normal
ECO	Slow
SPORT	Fast
NORMAL	Normal

i Information

- For more details on drive mode, refer to “Drive Mode Integrated Control System” section in chapter 6.
- Smart Cruise Control may not turn on or off in some of the drive modes for the operating conditions are not satisfied.
- If your vehicle is not equipped with Drive Mode Integrated Control system, Smart Cruise Control accelerates your vehicle at a normal level.

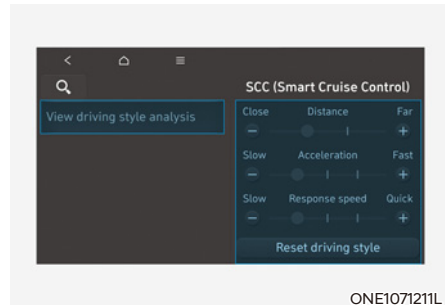


Based on Driving Style (if equipped)

- With the vehicle on, if 'Driver Assistance → Smart Cruise Control → Based on Driving Style' is selected from the Settings menu, Smart Cruise Control will operate based on the driver's driving style, such as vehicle distance, acceleration, reaction speed.
- While Smart Cruise Control is operating with 'Based on Drive Mode' selected, if you press and hold the Vehicle Distance (Ⓜ) button, Smart Cruise Control will change to 'Based on Driving Style'. While Smart Cruise Control is operating with 'Based on Driving Style', you press and hold the Vehicle Distance (Ⓜ) button, it will change to 'Based on Drive Mode'.

i Information

- **If equipped with Based on Driving Style, 'Based on Drive mode' and 'Based on Driving Style' can be selected from the settings menu by selecting 'Driver Assistance → Smart Cruise Control'.**
- **If 'Based on Drive mode' is selected, Smart Cruise Control will operate based on the drive mode selected.**

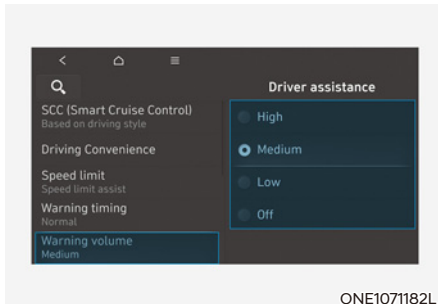


Driving Style Settings (if equipped)

With the vehicle on, select 'Driver Assistance → Smart Cruise Control → 'Driving Style Settings (or View driving style analysis)' from the Settings menu to check the driver's driving style, and to change each driving style manually.

i Information

- **'Driving Style Settings' (or 'View driving style analysis') is displayed when 'Based on Driving Style' is selected.**
- **Smart Cruise Control learns the driver's driving styles only when the driver drives the vehicle.**



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Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume 'High', 'Medium' or 'Low' for Smart Cruise Control.

However, even if 'Off' is selected, the Warning Volume of Smart Cruise Control will not turn off but the volume will sound as 'Low'.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

i Information

If the vehicle is restarted, Warning Volume will maintain the last setting.

Smart Cruise Control operation

Operating conditions

Smart Cruise Control will operate when the following conditions are satisfied.

Basic function

- The gear is in D (Drive)
- The driver's door is closed
- EPB (Electronic Parking Brake) is not applied
- Your vehicle speed is within the operating speed range
 - 10~180km/h (5~110mph): when there is no vehicle in front
 - 0~180km/h (0~110mph): when there is a vehicle in front
- ESC (Electronic Stability Control) or ABS is on
- ESC (Electronic Stability Control) or ABS is not controlling the vehicle
- Forward Collision-Avoidance Assist brake control is not operating
- Remote Smart Parking Assist brake control is not operating (if equipped)

i Information

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

Overtaking Acceleration Assist

Overtaking Acceleration Assist will operate when the turn signal indicator is turned on to the left (left-hand drive) or turned on to the right (right-hand drive) while Smart Cruise Control is operating, and the following conditions are satisfied:

- Your vehicle speed is above 60 km/h (40 mph)
- The hazard warning flasher is off
- A vehicle is detected in front of your vehicle
- Deceleration is not needed to maintain distance with the vehicle in front



WARNING

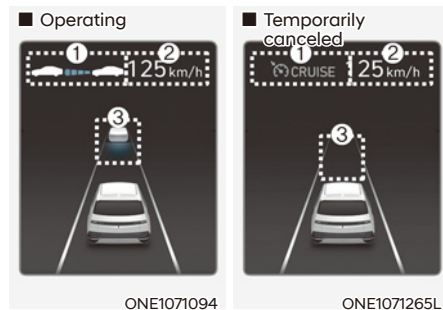
- **When the turn signal indicator is turned on to the left (left-hand drive) or turned on to the right (right-hand drive) while there is a vehicle ahead, the vehicle may accelerate temporarily. Pay attention to the road conditions at all times.**
- **Regardless of your countries driving direction, Overtaking Acceleration Assist will operate when the conditions are satisfied. When using the function in countries with different driving direction, always check the road conditions at all times.**

Smart Cruise Control display and control

Basic function

You can see the status of the Smart Cruise Control operation in the Driving Assist view on the cluster. Refer to “View Modes” section in chapter 4.

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

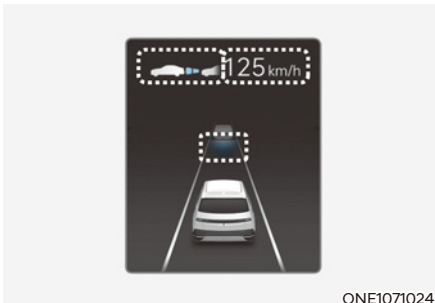


- When operating
 - (1) Whether there is a vehicle ahead and the selected distance level are displayed.
 - (2) Set speed is displayed.
 - (3) Whether there is a vehicle ahead and the target headway are displayed.
- When temporarily canceled
 - (1) CRUISE indicator is displayed.
 - (2) The previous set speed is shaded.
 - (3) Vehicle ahead and distance level are not displayed.

i Information

- The distance of the front vehicle on the cluster is displayed according to 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 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 cluster type or theme selected from the instrument cluster.

To temporarily accelerate



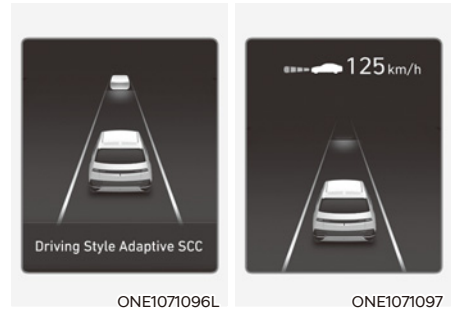
If you want to speed up temporarily without altering the set speed while Smart Cruise Control is operating, depress the accelerator pedal. While the accelerator pedal is depressed, the set speed, distance level and target distance will blink on the cluster.

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

⚠ WARNING

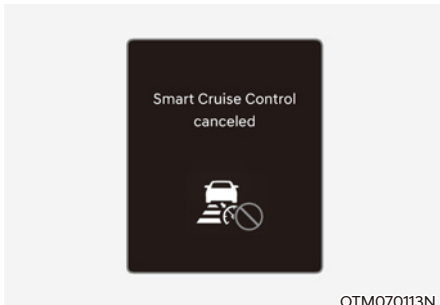
Be careful when accelerating temporarily, because the speed and distance is not controlled automatically even if there is a vehicle in front of you.

Based on Driving Style operating



When Based on Driving Style is operating, 'Driving Style Adaptive SCC' message will appear on the cluster for 2 seconds, and the distance level and target distance will be displayed based on the driving style.

Smart Cruise Control temporarily canceled



Smart Cruise Control will be temporarily canceled automatically when:

- The vehicle speed is above 190km/h (120mph)
- 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

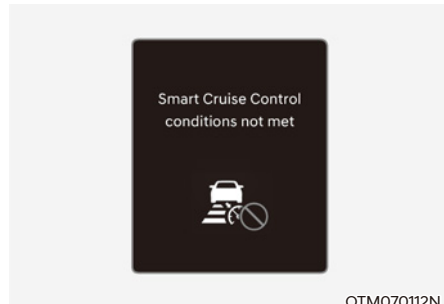
If Smart Cruise Control is temporarily canceled automatically, the 'Smart Cruise Control canceled' (or 'SCC (Smart Cruise Control) cancelled') warning message will appear on the cluster, and an audible warning will sound to warn the driver.


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



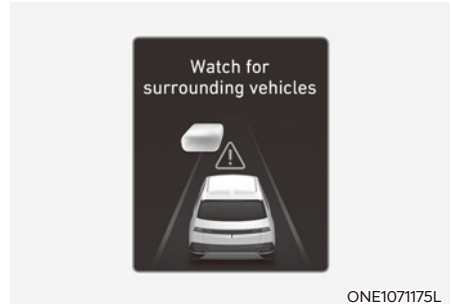
If the Driving Assist button, + switch, - switch or  switch is pushed when Smart Cruise Control operating conditions are not satisfied, the 'Smart Cruise Control conditions not met' (or 'SCC (Smart Cruise Ctrl. conditions not met)') will appear on the cluster, and an audible warning will sound.

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 cluster. Depress the accelerator pedal or push the + switch, - switch or ||○ switch to start driving.

Warning road conditions ahead



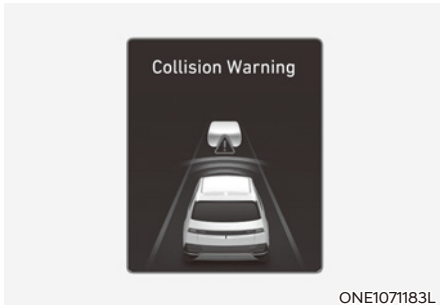
In the following situation, the 'Watch for surrounding vehicles' warning message will appear on the cluster, and an audible warning will sound to warn the driver of road conditions ahead.

- The vehicle in front disappears when Smart Cruise Control is maintaining the distance with the vehicle ahead while driving below a certain speed.
- While the 'Use switch or pedal to accelerate' message is displayed on the cluster, if there is no vehicle in front or the vehicle is far away from you, and the + switch, - switch or ||○ switch is pushed.

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 cluster, and an audible warning will sound 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, we recommend that Smart Cruise Control is turned off due to safety reasons.
- Turn off Smart Cruise Control when your vehicle is being towed.
- Smart Cruise Control may not operate normally 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 accidents caused by the driver.
- Always set the vehicle speed under the speed limit in your country.
- Vehicle distance, acceleration and reaction speed may change if the driver's driving style changes.



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.
- Based on Driving style does not reflect whether the driver has changed when determining the driver's driving style.
- 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 15 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.
- Based on Driving Style may not reflect the driver's driving style or driving conditions that affects driving safety.
- Based on Driving Style does not reflect any other driving style other than inter-vehicle distance, acceleration and reaction speed.
- The paddle shifter does not operate when Smart Cruise Control system is activated.

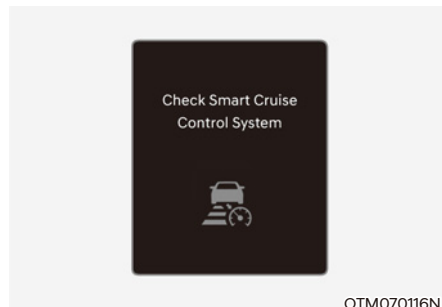


Information


The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Smart Cruise Control malfunction and limitations

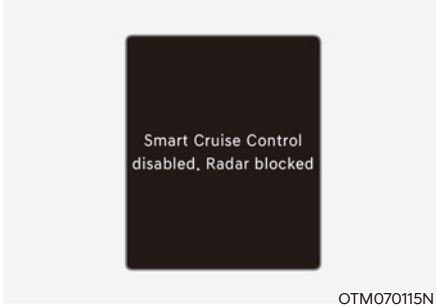
Smart Cruise Control malfunction



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When Smart Cruise Control is not working properly, the 'Check Smart Cruise Control system' (or 'Check SCC (Smart Cruise Control) system') warning message will appear, and the  warning light will illuminate on the cluster. We recommend that the vehicle be 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 'Smart Cruise Control disabled. Radar blocked' (or 'SCC (Smart Cruise Control) disabled. Radar blocked') warning message will appear for a certain period of time on the cluster.

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



WARNING

Even though the warning message does not appear on the 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.

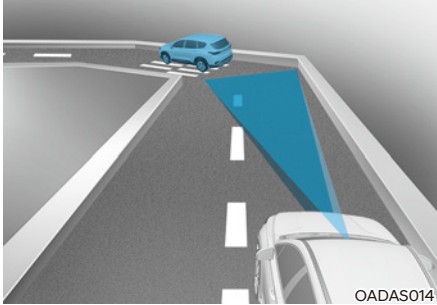
Limitations of Smart Cruise Control

Smart Cruise Control may not operate normally, 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, sticky or 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 headlamps are not on or are not bright
- Driving in heavy rain or snow, or thick fog
- Driving through steam, smoke or shadow

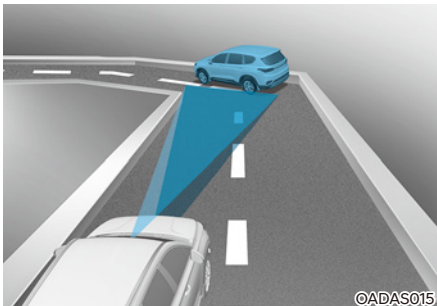
- Only part of the vehicle is detected
- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps are not on or are not bright
- The rear of the front vehicle is small or does not look normal (for example, tilted, overturned, 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.
- A material is near that reflects very well on 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 large 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 (or motorway) interchange or tollgate
- 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.

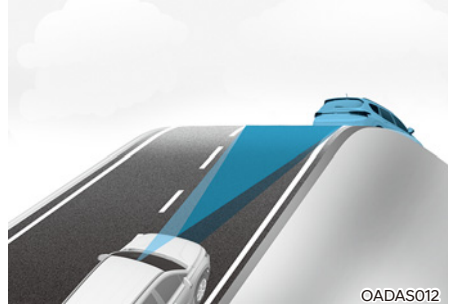
Select the appropriate set speed on curves and apply the brake pedal or accelerator pedal according to the road and driving conditions ahead.



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.

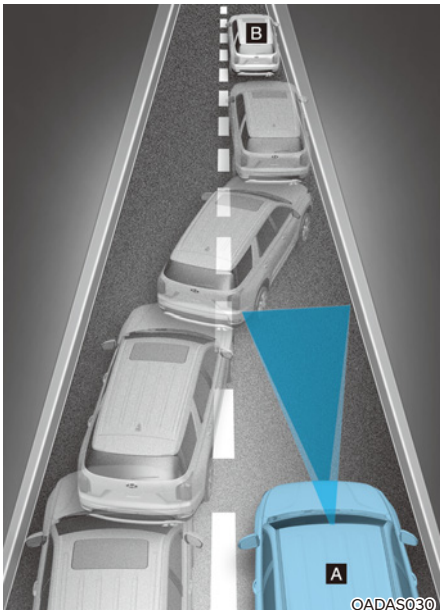
- Driving on a sloped road



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.

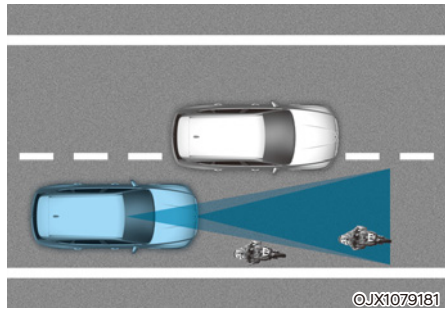
- Changing lanes



[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.

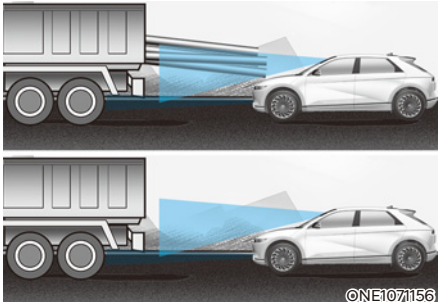
- Detecting vehicle



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

- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Oncoming vehicles
- Stopped vehicles
- Vehicles with small rear profile, such as trailers
- Narrow vehicles, such as motorcycles or bicycles
- Special vehicles
- Animals and pedestrians

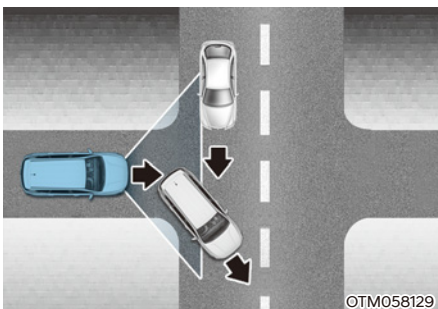
Adjust your vehicle speed by depressing the brake pedal according to the road and driving conditions ahead.



In the following cases, the vehicle in front cannot be detected by the sensor:

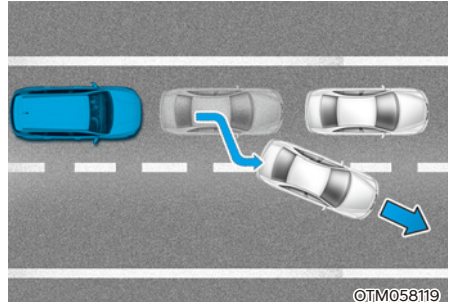
- Vehicles with higher ground clearance or vehicles carrying loads that stick out of the back of the vehicle
- Vehicles that has the front lifted due to heavy loads
- You are steering your vehicle
- Driving on narrow or sharply curved roads

Adjust your vehicle speed by depressing the brake pedal according to the road and driving conditions ahead.

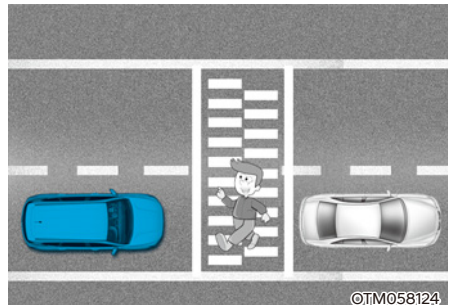


- When a vehicle ahead disappears at an intersection, your vehicle may accelerate.

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 will help drive at a certain speed according to the road conditions when driving on highways (or motorways) by using road information from the navigation system while Smart Cruise Control is operating.

i Information

- **Navigation-based Smart Cruise Control is available only on controlled access road of certain highways.**
 - * **Controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.**
- **Additional highways may be expanded by future navigation updates.**

i Information

Navigation-based Smart Cruise Control operates on main roads of highways (or motorways), and does not operate on interchanges or junctions.

Highway Curve Zone Auto Slowdown

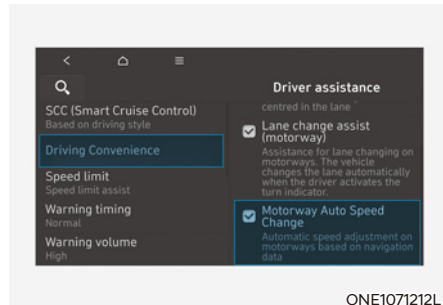
If vehicle speed is high, Highway Curve Zone Auto Slowdown function will temporarily decelerate your vehicle or limit acceleration to help you drive safely on a curve based on the curve information from the navigation.

Highway Set Speed Auto Change

Highway Set Speed Auto Change function automatically changes Smart Cruise Control set speed based on the speed limit information from the navigation.

Navigation-based Smart Cruise Control settings

Setting features



With the vehicle on, select 'Driver Assistance → Driving Assist → Highway (or Motorway) Auto Speed Change' from the Settings menu to turn on Navigation-based Smart Cruise Control and deselect to turn off the function.

i Information

When there is a problem with Navigation-based Smart Cruise Control, the function cannot be set from the Settings menu.

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:

- Smart Cruise Control is operating
- Driving on main roads of highways (or motorways)

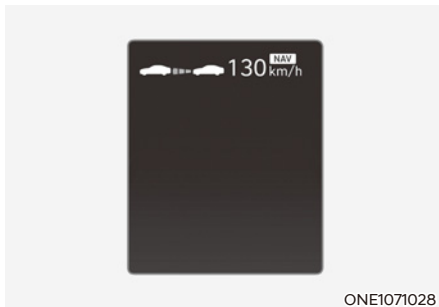
i Information

For more details on how to operate Smart Cruise Control, refer to “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 cluster as follows:

- Navigation-based Smart Cruise Control standby



If the operating conditions are satisfied, the white **NAV** indicator will illuminate.

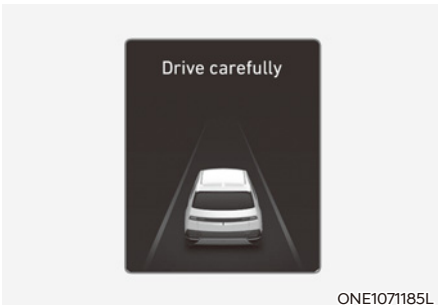
- Navigation-based Smart Cruise Control operating



If temporary deceleration is required in the standby state and Navigation-based Smart Cruise Control is operating, the green **NAV** symbol will illuminate on the cluster.

If the Highway Set Speed Auto Change function operates, the **NAV** symbol and set speed will illuminate in green on the cluster, and an audible warning will sound.

 **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**

 **Information**



Highway Curve Zone Auto Slowdown and Highway Set Speed Auto Change function uses the same  symbol.

Highway Curve Zone Auto Slowdown

- Depending on the curve ahead on the highway (or motorway), 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.

Highway Set Speed Auto Change

- Highway Set Speed Auto Change function will operate when Smart Cruise Control set speed and the highway (or motorway) speed limit is matched.
- While Highway Set Speed Auto Change function is operating, when the highway (or motorway), speed limit changes, Smart Cruise Control set speed automatically changes to the changed speed limit.
- If Smart Cruise Control set speed is adjusted different from the speed limit, Highway Set Speed Auto Change function will be in the standby state.
- If Highway Set Speed Auto Change function has changed to the standby state by driving on a road other than the highway (or motorway) main road, Highway Set Speed Auto Change function will operate again when you drive on the main road again without setting the set speed.

- If Highway Set Speed Auto Change function has changed to the standby state by depressing the brake pedal or pressing the  switch on the steering wheel, press the  switch to restart the function.
- Highway Set Speed Auto Change function does not operate on highway interchanges or junctions.

Information

- **Highway Set Speed Auto Change function only operates based on the speed limits of the highway (or motorway), it does not work with the speed cameras.**
- **When Highway Set Speed Auto Change function is operating, the vehicle automatically accelerates or decelerates when the highway (or motorway) speed limit changes.**
- **The maximum set speed for Highway Set Speed Auto Change function is 140 km/h (90 mph).**
- **If the speed limit of a new road is not updated in the navigation, Highway Set Speed Auto Change function may not operate properly.**
- **If the speed unit is set to a unit other than the speed unit used in your country, Highway Set Speed Auto Change function may not operate properly.**

Information

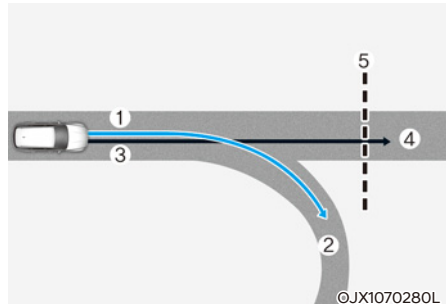
The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Limitations of Navigation-based Smart Cruise Control

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

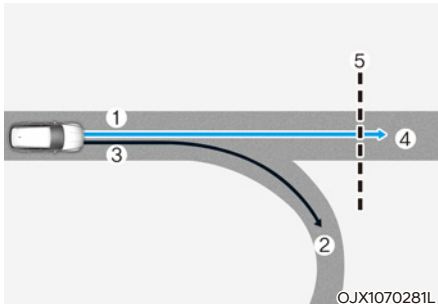
- The navigation is not working properly
- Map information is not transmitted due to infotainment system's abnormal operation
- Speed limit and road information in the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- 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 the route set in the navigation
- 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)
- 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 on a road that is controlled
- There is bad weather, such as heavy rain, heavy snow, etc.
- Driving on a road that is sharply curved



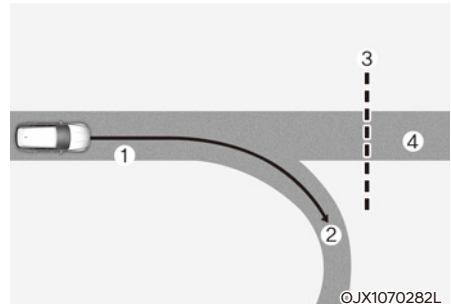
[1] : Set route, [2] : Branch line, [3] : Driving route,
[4] : Main road, [5] : Curved road section

- 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 temporarily 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 cancelled when you leave the highway (or motorway) 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, we recommend that Navigation-based Smart Cruise Control is turned off due to safety reasons.
- After you pass through a tollgate on a highway (or motorway), 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.



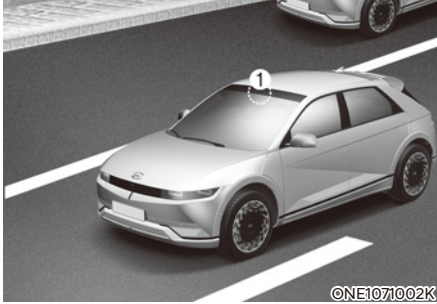
Information

- The 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 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) (IF EQUIPPED)

Lane Following Assist is designed to help detect lane markings and/or vehicles on the road, and assists the driver's steering to help keep the vehicle between lanes.

Detecting sensor



[1]: Front view camera

The front view camera is used as a detecting sensor to detect lane markings and front vehicles.

Refer to the picture above for the detailed location of the detecting sensor.

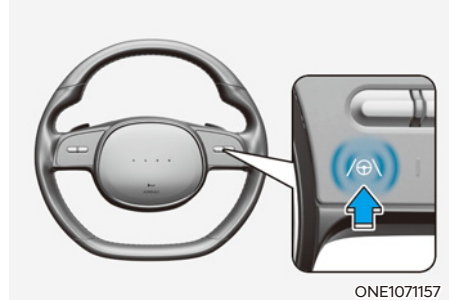


CAUTION

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


Lane Following Assist settings

Setting features

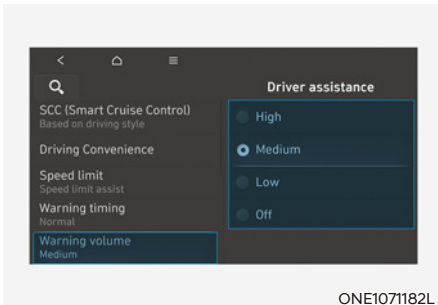


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Turning Lane Following Assist On/Off

With the vehicle on, shortly press the Lane Driving Assist button located on the steering wheel to turn on Lane Following Assist. The grey or green  indicator light will illuminate on the cluster.

Press the button again to turn off the function.



Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Hands-off warning.

However, even if 'Off' is selected, the Hands-off Warning Volume will not turn off but the volume will sound as 'Low'.


If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

Lane Following Assist operation

Warning and control




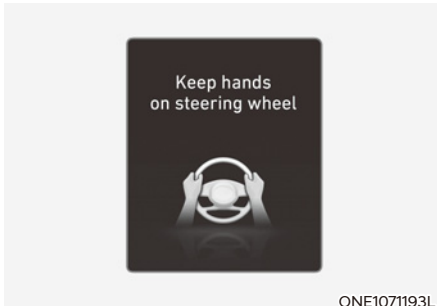
Lane Following Assist

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 will illuminate on the cluster, and Lane Following Assist will help the vehicle stay in lane by assisting the steering wheel.



CAUTION

When the steering wheel is not assisted, the white  indicator light will blink and change to grey.

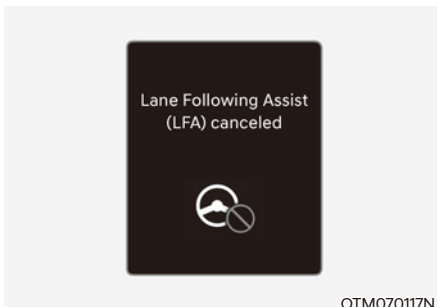


Hands-off warning

If the driver takes their hands off the steering wheel for several seconds, the 'Place hands on the steering wheel' (or 'Keep hands on the 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, the 'Lane Following Assist (LFA) canceled' (or 'LFA (Lane Following Assist) cancelled') warning message will appear and Lane Following Assist will be automatically canceled.

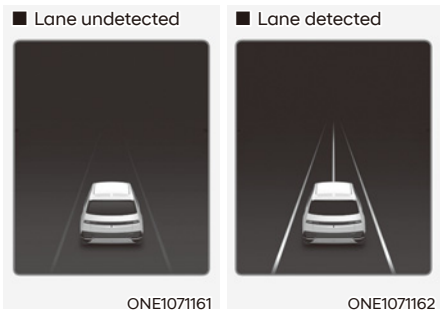


WARNING

- 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 details on setting the functions in the infotainment system, refer to “Vehicle Settings” section in chapter 4.
- When both lane markings are detected, the lane lines on the cluster will change from grey to white.

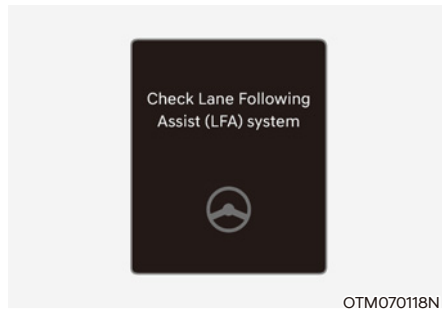


- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the instrument cluster.
- If lane markings are not detected, steering wheel control by Lane Following Assist can be limited depending on whether a vehicle is in front or the driving conditions 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.

i Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Lane Following Assist malfunction and limitations
Lane Following Assist malfunction



When Lane Following Assist is not working properly, the ‘Check Lane Following Assist (LFA) system’ (or ‘Check LFA (Lane Following Assist) system’) warning message will appear for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

Limitations of Lane Following Assist

For more details on Lane Following Assist limitations, refer to “Lane Keeping Assist (LKA)” section in this chapter.

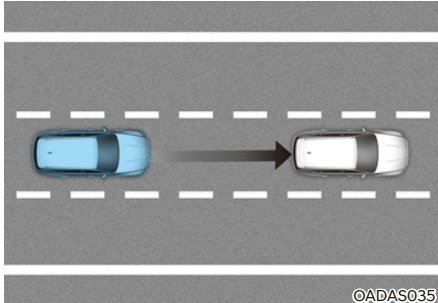
⚠ WARNING

For more details on Lane Following Assist precautions, refer to “Lane Keeping Assist (LKA)” section in this chapter.

HIGHWAY DRIVING ASSIST (HDA) (IF EQUIPPED)

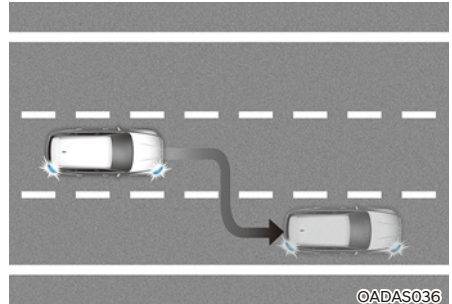
Basic function

Highway Driving Assist is designed to help detect vehicles and lanes ahead, and help maintain distance from the vehicle ahead, maintain the set speed, and keep the vehicle between lanes while driving on the highway (or motorway).



Highway Lane Change Assist (if equipped)

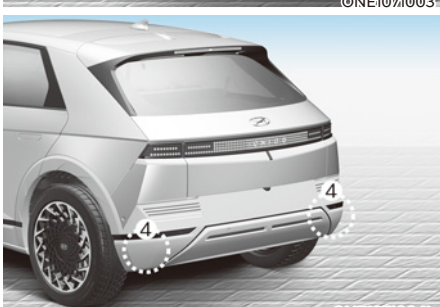
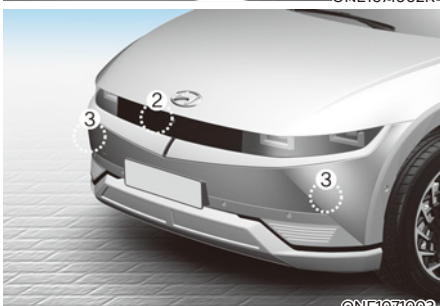
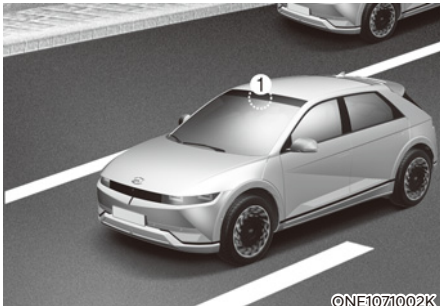
Highway Lane Change Assist function helps change lanes to the direction the driver slightly moves the turn signal switch if the function judges that lane change is possible.



i Information

- The Highway Driving Assist is available only on controlled access road of certain highways. (except for the interchange/junction)
 - * Controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.
- Additional highways may be expanded by future navigation updates.

Detecting sensor



[1] : Front view camera, [2]: Front radar,
[3] : Front corner radar (if equipped),
[4] : Rear corner radar (if equipped)

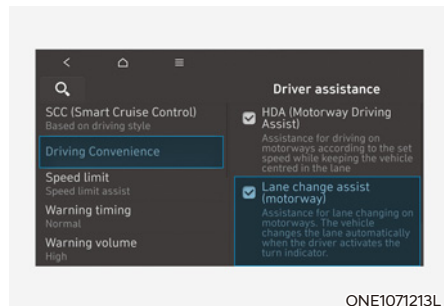
Refer to the picture above for the detailed location of the detecting sensors.



CAUTION

For more details on the precautions of the detecting sensors, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.

Highway Driving Assist settings Setting features



Basic function

With the vehicle on, select or deselect ‘Driver Assistance → Driving Convenience’ from the Settings menu to set whether or not to use each function.

- If ‘Highway Driving Assist’ (or ‘HDA (Motorway 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)

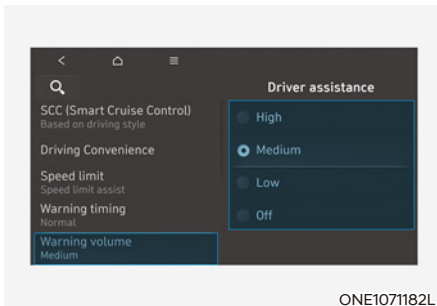
- If ‘Highway Lane Change Assist’ (or ‘Lane change assist(motorway)’) is selected, it helps the driver change lanes.

i 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. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.
- If the vehicle is restarted, the functions will maintain the last setting.

! WARNING

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



Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Highway Driving Assist.

However, even if 'Off' is selected, the Hands-off Warning Volume will not turn off but the volume will sound as 'Low'.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

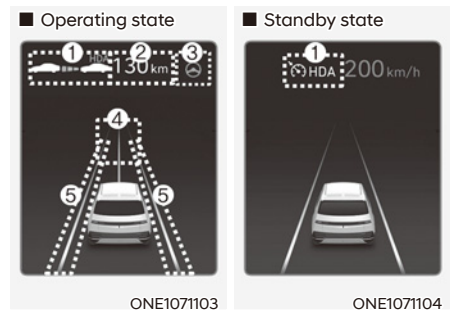
Highway Driving Assist operation

Basic function

Display and control

You can see the status of the Highway Driving Assist operation in the Driving Assist view on the cluster. Refer to "View Modes" section in chapter 4.

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



- (1) Highway Driving Assist indicator, whether there is a vehicle ahead and the selected distance level are displayed.

* Highway Driving Assist indicator

- Green HDA : Operating state
- Grey HDA : Standby state
- White HDA blink: Accelerator depressed state

- (2) Set speed is displayed.
- (3) Lane Following Assist indicator displayed.
- (4) Whether there is a vehicle ahead and the selected headway are displayed.
- (5) Whether the lane is detected or not is displayed.

i Information

For more details on the display refer to “Smart Cruise Control (SCC)” and “Lane Following Assist (LFA)” sections in this chapter.

Highway Driving Assist operating

Highway Driving Assist operates when:

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

i Information

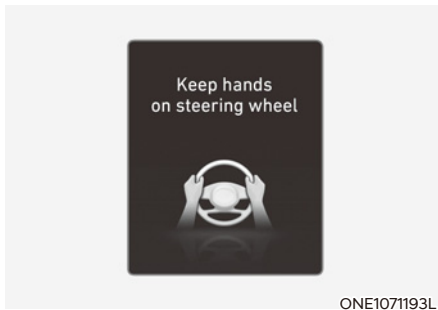
- While driving on the highway (or motorway), if Smart Cruise Control starts operating, Highway Driving Assist will operate.
- When entering the main roads of highways (or motorways) while Smart Cruise Control is operating, Driving Assist will not turn on if Lane Following Assist is turned off.

- 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 cluster. Depress the accelerator pedal or push the + switch, - switch or switch to start driving.

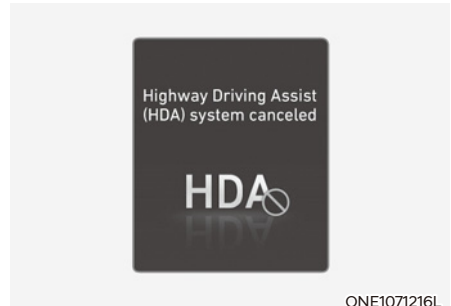
- Hands-off warning



If the driver takes their hands off the steering wheel for several seconds, the 'Place hands on the steering wheel' (or 'Keep hands on the steering wheel') warning message will appear and an audible warning will sound in stages.

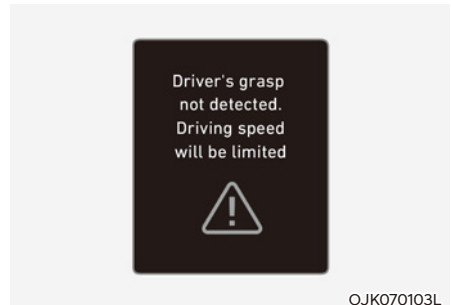
First stage : Warning message

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, the 'Highway Driving Assist (HDA) canceled' (or 'HDA (Highway Driving Assist) cancelled') warning message will appear and Highway Driving Assist and Lane Change Assist will be automatically canceled.

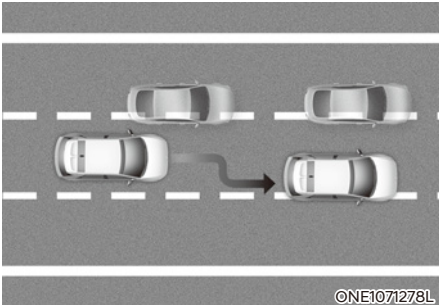
- Driving speed limit



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 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 vehicles in both sides of the lane that are driving close to you, the function will not veer to the opposite side of the lane.

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 normally.

i Information

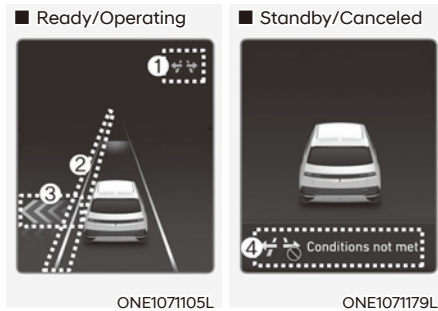
- **Driving Speed Limit helps you drive below 60 km/h (40 mph). At this time, the vehicle decelerates due to the vehicle ahead. After the vehicle has decelerated, it cannot automatically accelerate.**
- **Driving Speed Limit will cancel in the following circumstances:**
 - **When the driver grabs the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

Highway Lane Change Assist (if equipped)





Display and control

You can see the status of the Highway Lane Change Assist function operation in the Driving Assist view on the cluster. Refer to “View Modes” section in chapter 4.

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



(1) Highway Lane Change Assist indicator

- Green  on : Ready state
- Green  blink : Operating state
- Grey  on : Standby state
- White  blink : Canceled state

(2) Lane line

The lane line is displayed in the same way as the Highway Lane Change Assist indicator (1) above. However, if the function is in the standby state, it displays whether the lane line is recognized or not.

(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.

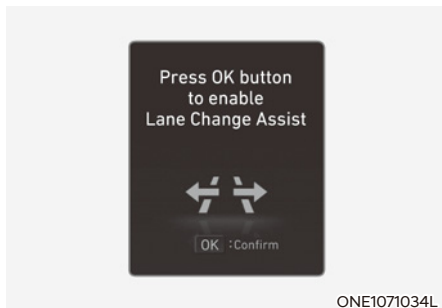
(4) Message

- Message is displayed when the function does not operate even though the turn signal lever 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.
- The OK button is pressed on the steering wheel while a message asking to use Highway Lane Change Assist is displayed on the cluster.



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 70 km/h (44 mph)
- Hands-off warning is not displayed on the cluster
- Hazard warning flasher is off

Information

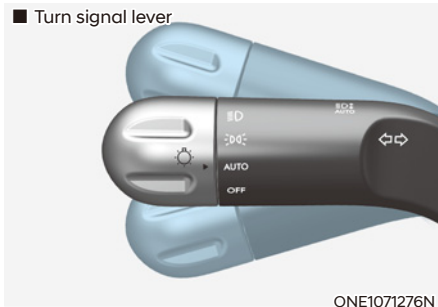
- While Lane Change Assist function is turned on (indicator on), Lane Following Assist will not cancel even if the turn signal indicator or hazard warning flasher is operating.
- Lane Change Assist function turns off automatically when driven in the following road conditions:
 - One driving lane
 - A 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 65 km/h (40 mph), 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 operating

- Turn signal lever



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

- When the turn signal lever is placed at a position, the Highway Lane Change Assist function is performed. After that, if the turn signal lever is placed in neutral, Highway Lane Change Assist function is canceled before stepping on the lane.

The Highway Lane Change Assist function is not canceled after stepping on the lane, but when the lane change is completed, it is canceled and the turn signal turns off.

- 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 tollgate on the main road of the highway (or motorway)
- 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:

- When the turn signal lever is moved to A and placed in neutral before stepping on the lane while the Highway Lane Change Assist function is operating
- The turn signal lever is turned on in the opposite direction of lane change
- The steering wheel is steered sharply



WARNING

- While the function 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 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 lamps

- 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 an 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 65 km/h (40 mph)

- 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 normally on roads with pedestrians or cyclists, such as an intersection or crosswalk. Always pay attention to road and driving conditions while driving.




Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

Highway Driving Assist malfunction and limitations

Highway Driving Assist malfunction



When Highway Driving Assist or Highway Lane Change function is not working properly, the 'Check Highway Driving Assist (HDA) system' or 'Check Lane Change Assist function' warning message will appear, and the  warning light will illuminate on the cluster. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

WARNING

- The driver is responsible for controlling the vehicle for 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 accidents 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 (vehicles, motorcycles, bicycles, pedestrians, unspecified objects, structures, etc.) that may collide with a 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, we recommend that Highway Driving Assist is turned off due to 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.**
- 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

Limitations of Highway Driving Assist

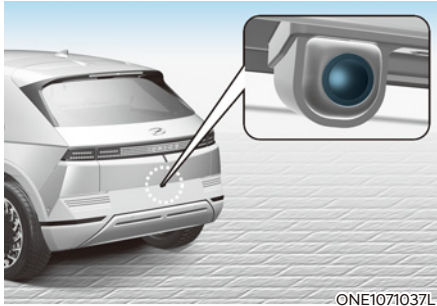
Highway Driving Assist and Highway Lane Change Assist (if equipped) may not operate normally, or may not operate under the following circumstances:

- 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.

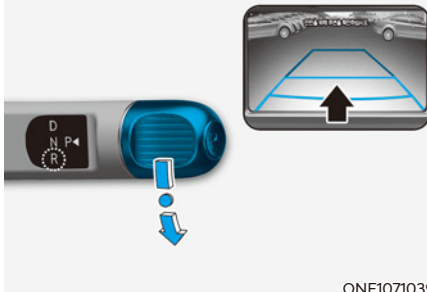
Information

For more details on the limitations of the front view camera, front radar, front corner radar and rear corner radar, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.

REAR VIEW MONITOR (RVM) (IF EQUIPPED)



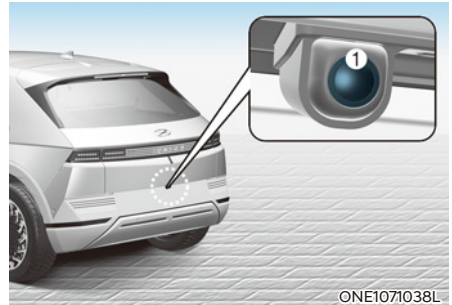
ONE1071037L



ONE1071039

Rear View Monitor will show the area behind the vehicle to assist you when parking or backing up.

Detecting sensor



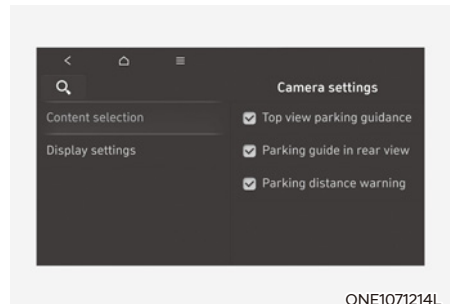
ONE1071038L

[1] : Rear view camera

Refer to the picture above for the detailed location of the detecting sensor.

Rear View Monitor settings

Camera settings

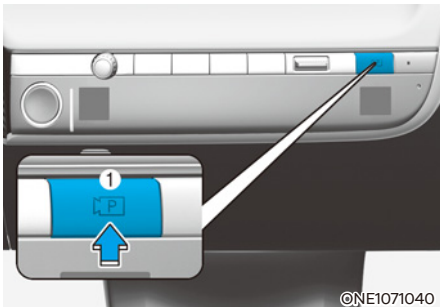


ONE1071214L

- You can change Rear View Monitor 'Display Contents' by touching the setup icon (⚙️) on the screen while Rear View Monitor is operating, or selecting 'Driver Assistance → Parking Safety → Camera Settings' from the Settings menu while the vehicle is on.
- To use Rear View while Driving, select 'Camera Settings → Display Contents → Keeps Rear Camera' from the Settings menu while the vehicle is on.
- In the Display Contents, you can change setting for 'Rear View' and in the Display Settings, you can change the screen's 'Brightness' and 'Contrast'.

Rear View Monitor operation

Operating button



Parking/View button

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

Press the button again to turn off the function.

Rear view

Operating conditions

- Shift the gear to R (Reverse), the image will appear on the screen.
- Press the Parking/View button (1) while the gear is in P (Park), the image will appear on the screen.

Off conditions

- The rear view cannot be turned off when the gear is in R (Reverse).
- Press the Parking/View button (1) again while the gear is in P (Park) with the rear view on the screen, the rear view will turn off.
- Shift the gear from R (Reverse) to P (Park), the rear view will turn off.

Extended Rear View function

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

Operating conditions

Shift the gear from R (Reverse) to N (Neutral) or D (Drive), the rear view will appear on the screen.

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.

Rear view while driving



The driver is able to check the rear view on the screen while driving, it is to assist with safe driving.

Operating conditions

Press the Parking/View button (1) while the gear is in D (Drive) or N (Neutral), the driving rear view will appear on the screen.

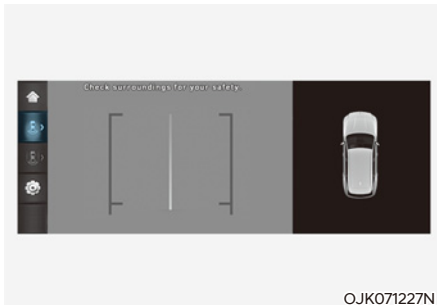
Off conditions


- Press the Parking/View button (1) again, the driving rear view will turn off.
- Press one of the infotainment system button (2), the driving rear view will turn off.
- Shift the gear to P (Park), the driving rear view will turn off.

When operating

If the gear is shifted to R (Reverse), while Driving rear view is displayed on the screen, the screen will change to rear view with parking guidance.

Rear top view



When you touch the  icon, the top view is displayed on the screen and shows the distance from the vehicle in the back of your vehicle while parking.

Rear View Monitor malfunction and limitations

Rear View Monitor malfunction

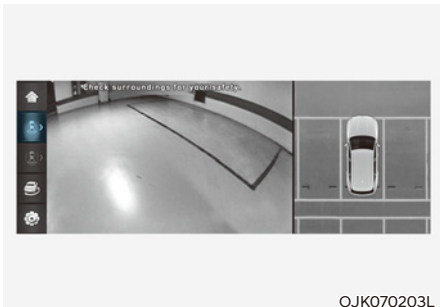
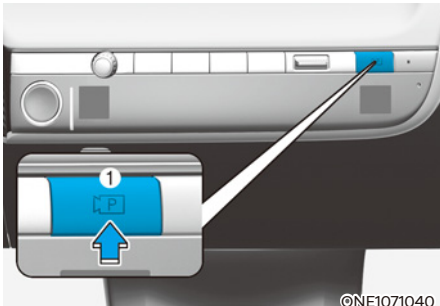
When Rear View Monitor is not working properly, or the screen flickers, or the camera image does not display normally, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



WARNING

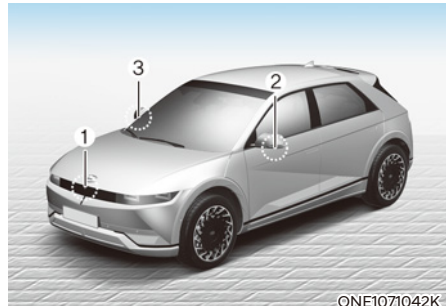
- **The rear view camera does not cover the complete area behind the vehicle. The driver should always check the rear area directly through the inside and outside rearview mirror before parking or backing up.**
- **The image shown on the screen may differ from the actual distance of the object. Make sure to directly check the vehicle's surroundings for safety.**
- **Always keep the 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 normally. 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 can assist in parking by allowing the driver to see around the vehicle.

Detecting sensor

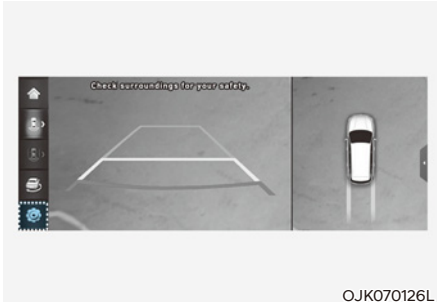


- [1] : Surround-front view camera,
- [2],[3] : Surround-side view camera
(under the outside rearview mirror),
- [4] : Surround-rear view camera

Refer to the picture above for the detailed location of the detecting sensors.

Surround View Monitor settings

Camera settings



- You can change Surround View Monitor 'Display Contents' or 'Display Settings' by touching the setup icon (⚙️) on the screen while Surround View Monitor is operating, or selecting 'Driver Assistance → Parking Safety → Camera Settings' from the Settings menu while the vehicle is on.
- In the Display Contents, you can change settings for 'Top View Parking Guidance', 'Rear View Parking Guidance' and 'Parking Distance Warning'.

Top View Parking Guidance

■ Front top view

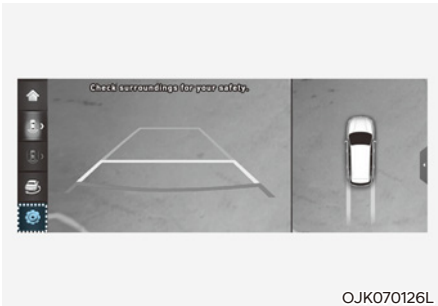


■ Rear top view



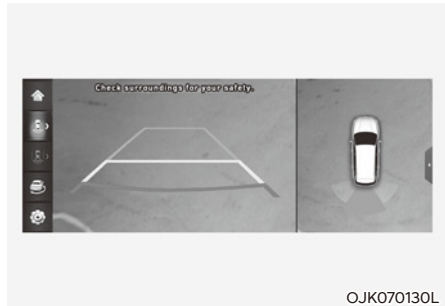
- When the 'Top View Parking Guidance' is selected, parking guidance is displayed on the right side of the Surround View Monitor screen.
- The 'Top View Parking Guidance' can be connected with the front top view parking guidance or the rear top view parking guidance.

Rear View Parking Guidance



- When the 'Rear View Parking Guidance' is selected, parking guidance is displayed in the rear view.
- The horizontal guideline of the Rear View Parking Guidance shows the distance of 0.5 m (1.6 ft.), 1 m (3.3 ft.) and 2.3 m (7.6 ft.) from the vehicle.

Parking Distance Warning



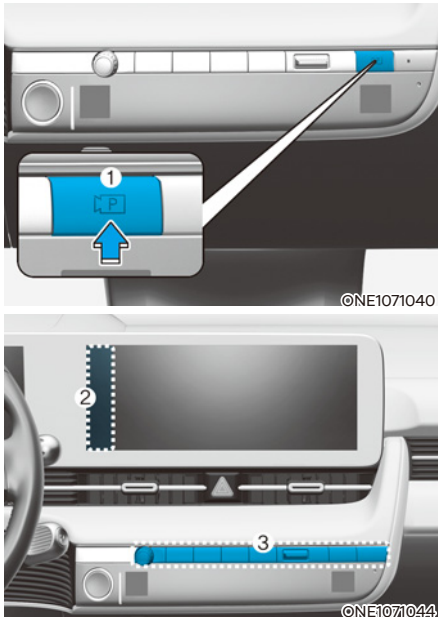
- When the 'Parking Distance Warning' is selected, parking distance warning is displayed on the right side of the Surround View Monitor screen.
- The image will be displayed only when Parking Distance Warning is warning the driver.

Surround View Monitor Auto On

With the vehicle on, select 'Driver Assistance → Parking Safety → Surround View Monitor Auto On' from the Settings menu to use the function.

Surround View Monitor operation

Operating button



- Press the Parking/View button (1) to turn on Surround View Monitor. Press the button again to turn off the function.
- Other view modes can be selected by touching the view icons (2) on the Surround View Monitor screen.
- When one of the infotainment system button (3) is pressed without the gear in R (Reverse), Surround View Monitor will turn off.

Front view

The front image is displayed on the screen when the gear is in N (Neutral) or D (Drive) to assist in parking. The front view has a top view/front view/side view/3D view.

Operating conditions

- When the gear is shifted from R (Reverse) to N (Neutral) or D (Drive), the last set mode of front view function will be selected.
- Front view function will operate when the following conditions are satisfied:
 - While the infotainment system screen is being displayed, press the Parking/View button (1) briefly when the gear is in D (Drive) or N (Neutral) and vehicle speed is below 10 km/h (6 mph).
- Surround View Monitor Auto On function will operate when the following conditions are satisfied:
 - With 'Driver Assistance → Parking Safety → Surround View Monitor Auto On' selected from the Settings menu, the front parking assist view screen is displayed when Parking Distance Warning warns the driver while driving in D (Drive).

Off conditions

- Press the Parking/View button (1) again, the image will turn off.
- When vehicle speed is above 10 km/h (6 mph) with the gear in D (Drive), Surround View Monitor will turn off and the screen will change back to the previous infotainment system screen. Although you drive below 10 km/h (6 mph) again, Surround View Monitor will not turn on.
- Press one of the infotainment system button (3), the screen will change to the infotainment system screen.
- Shift the gear to P (Park), the image will turn off.

Rear view

The rear image is displayed on the screen when the gear is in P (Park) to assist in parking. The rear view has a top view/rear view/side view/3D view.

Operating conditions

- Shift the gear to R (Reverse), the image will appear on the screen.
- Press the Parking/View button (1) while the gear is in P (Park), the image will appear on the screen.


Off conditions

- The image cannot be turned off when the gear is in R (Reverse).
- Shift the gear from R (Reverse) to P (Park), the image will turn off.
- Press the Parking/View button (1) again while the gear is in P (Park) with the image on the screen.

Rear view while driving

The driver is able to check the rear view on the screen while driving, it is to assist with safe driving.

Operating conditions

- The vehicle is ON.
- Press the Parking/View button (1) when vehicle speed is above 10 km/h (6 mph), Rear View while driving will appear on the screen.
- The  icon is touched on the Surround View Monitor screen when vehicle speed is below 10 km/h (6 mph), Rear View while driving will appear on the screen.

Off conditions

- Press the Parking/View button (1) again, the screen will change back to the previous infotainment system screen.
- Select other view modes from the Surround View Monitor screen when vehicle speed is below 10 km/h (6 mph), Rear View while driving will turn off.
- Press one of the infotainment system button (3), the screen will change to the infotainment system screen.
- Shift the gear to P (Park), Rear View while driving will turn off.

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 normally, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

Limitations of Surround View Monitor

- The screen may be displayed abnormally, and an icon will appear at the top left side of the screen under the following circumstances:
 - The tailgate is opened
 - The driver or front passenger door is opened
 - The outside rearview 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. 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 normally. 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.

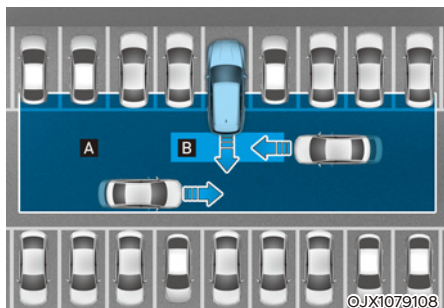


Information

- When Rear View while Driving is on, it stays on while driving regardless of vehicle speed.
- When Rear View while Driving is on while backing up, the screen changes to the rear view.

REAR CROSS-TRAFFIC COLLISION-AVOIDANCE ASSIST (RCCA) (IF EQUIPPED)

Rear Cross-Traffic Collision-Avoidance Assist is designed to help detect vehicles approaching from the left and right side while your vehicle is reversing, and warn the driver that a collision is imminent with a warning message and an audible warning. Also, braking is assisted to help prevent collision.



[A] : Rear Cross-Traffic Collision Warning operating range,

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

CAUTION

The time of warning may vary depending on vehicle speed of the approaching vehicle.

Detecting sensor



[1] : Rear corner radar

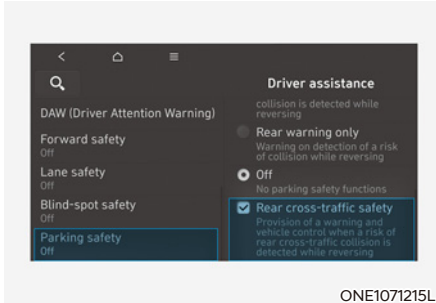
Refer to the picture above for the detailed location of the detecting sensors.

Information

For more details on the precautions of the rear corner radar, refer to “Blind-Spot Collision-Avoidance Assist (BCA)” section in this chapter.

Rear Cross-Traffic Collision-Avoidance Assist settings

Setting features



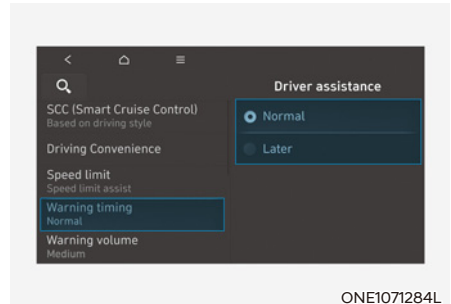
Rear Cross-Traffic Safety

With the vehicle on, select 'Driver Assistance → Parking Safety → Rear Cross-Traffic Safety' from the Settings menu to turn on Rear Cross-Traffic Collision-Avoidance Assist and deselect to turn off the function.



WARNING

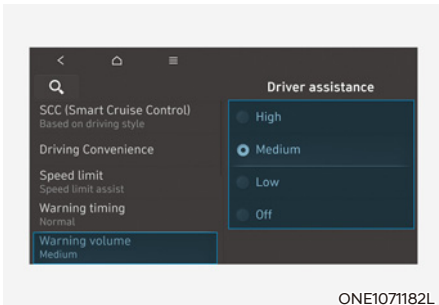
When the vehicle is restarted, Rear Cross-Traffic Collision-Avoidance Assist will always turn on. However, if 'Off' is selected after the vehicle is restarted, the driver should always be aware of the surroundings and drive safely.



Warning Timing

With the vehicle on, select 'Driver Assistance → Warning Timing' from the Settings menu to change the initial warning activation time for Rear Cross-Traffic Collision-Avoidance Assist.

When the vehicle is first delivered, Warning Timing is set to 'Normal'. If you change the Warning Timing, the warning time of other Driver Assistance systems may change.



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Warning Volume

With the vehicle on, select 'Driver Assistance → Warning volume' or 'Sound → Driver Assist Warning → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Rear Cross-Traffic Collision-Avoidance Assist.

However, when Warning Volume is turned off, the steering wheel vibration function will turn on.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

CAUTION

- The setting of the Warning Timing and Warning Volume applies to all functions of the Rear Collision-Avoidance Assist.
- Even though 'Normal' is selected for Warning Timing, if the vehicles from the left and right side approaches at high speed, the initial warning activation time may seem late.
- Select 'Late' for Warning Timing when traffic is light and when driving speed is slow.

Information

If the vehicle is restarted, Warning Timing and Warning Volume will maintain the last setting.

Rear Cross-Traffic Collision-Avoidance Assist operation

Warning and control

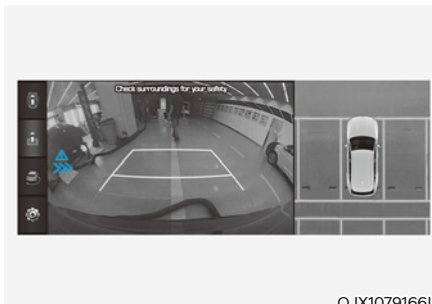
Rear Cross-Traffic Collision-Avoidance Assist will warn and control the vehicle depending on collision risk level: 'Collision Warning', 'Emergency Braking' and 'Stopping vehicle and ending brake control'.



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Collision Warning

- To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the outside rearview mirror will blink and a warning will appear on the cluster. At the same time, an audible warning will sound and the steering wheel will vibrate. If the Rear View Monitor is operating, a warning will also appear on the infotainment system screen.

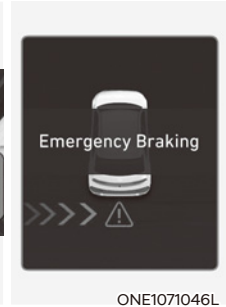
- Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:
 - The gear is shifted to R (Reverse)
 - Vehicle speed is below 8 km/h (5 mph)
 - The approaching vehicle is within approximately 25 m (82 ft.) from the left and right side of your vehicle
 - The speed of the vehicle approaching from the left and right is above 5 km/h (3 mph)

i Information

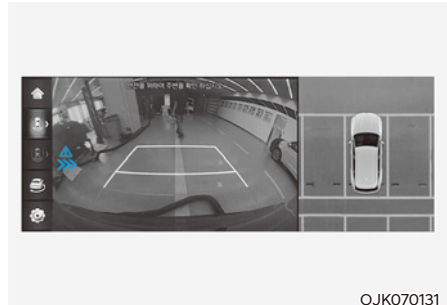
If the operating conditions are satisfied, there will be a warning whenever the vehicle approaches from the left or right side even though your vehicle speed is 0 km/h (0 mph).



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Emergency Braking

- To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the outside rearview mirror will blink and a warning message will appear on the cluster. At the same time, an audible warning will sound and the steering wheel will vibrate. A warning will also appear on the infotainment system screen.

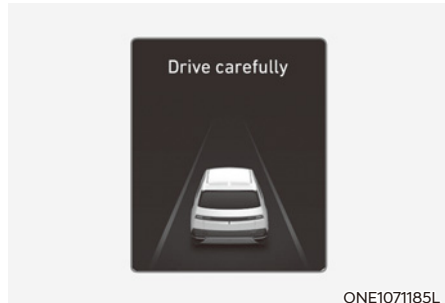
- Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:
 - The gear is shifted to R (Reverse)
 - Vehicle speed is below 8 km/h (5 mph)
 - The approaching vehicle is within approximately 1.5 m (5 ft.) from the left and right side of your vehicle
 - The speed of the vehicle approaching from the left and right is above 5 km/h (3 mph)
- Emergency braking will be 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 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 approximately 2 seconds.
- 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, 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's 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 performance will operate 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 should hold 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.

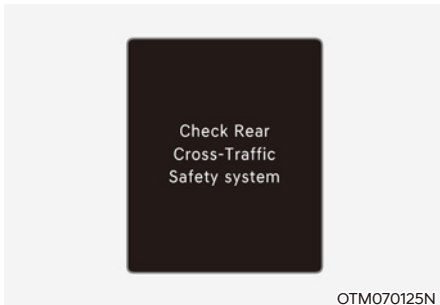


Information

The images or colors may be displayed differently depending on the specifications of the instrument panel or theme.

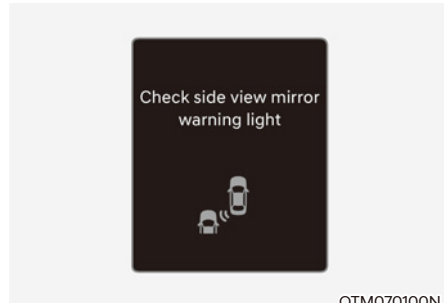
Rear Cross-Traffic Collision-Avoidance Assist malfunction and limitations

Rear Cross-Traffic Collision-Avoidance Assist malfunction



OTM070125N

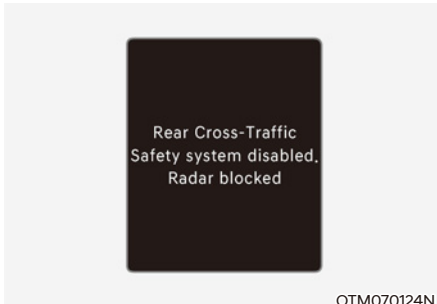
When Rear Cross-Traffic Collision-Avoidance Assist is not working properly, the 'Check Rear Cross-Traffic Safety system' warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



OTM070100N

When the outside rearview mirror warning light is not working properly, the 'Check side view mirror warning light' (or 'Check outside mirror warning icon') warning message will appear on the cluster for several seconds, and the master (⚠) warning light will illuminate on the cluster. If the master warning light illuminates, we recommend that the vehicle be 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 'Rear Cross-Traffic Safety system disabled. Radar blocked' or 'Rear cross-traffic safety functions disabled. Radar blocked') warning message will appear on the cluster.

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

If Rear Cross-Traffic Collision-Avoidance Assist does not operate normally after it is removed, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



WARNING

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



CAUTION

Turn off Rear Cross-Traffic Collision-Avoidance Assist to install a trailer, carrier, etc., or remove the trailer, carrier, etc., to use Rear Cross-Traffic Collision-Avoidance Assist.

Limitations of Rear Cross-Traffic Collision-Avoidance Assist

Rear Cross-Traffic Collision-Avoidance Assist may not operate normally, 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)

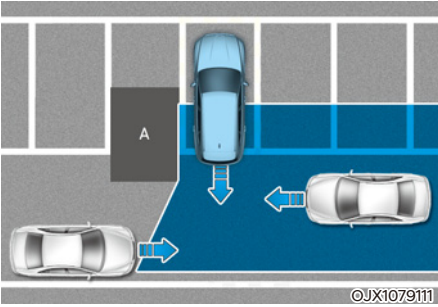


Information

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

 **WARNING**

- Driving near a vehicle or structure

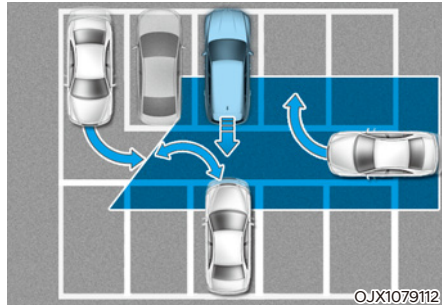


[A] : Structure

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.

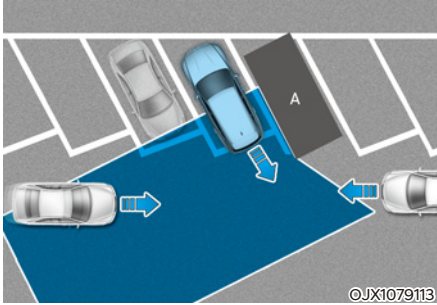
- When the vehicle is in a complex parking environment



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

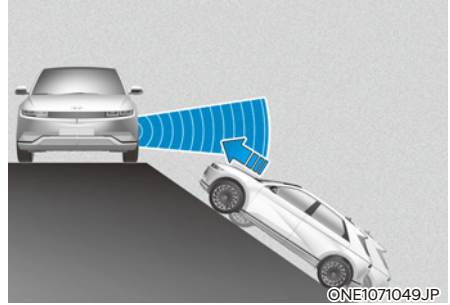


[A] : Vehicle

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.

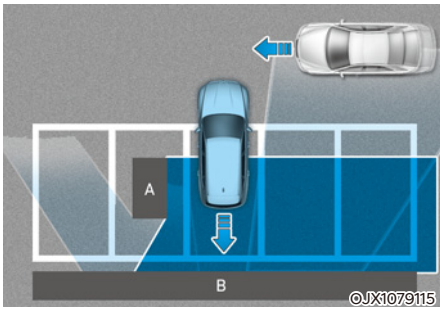
- When the vehicle is on or near a slope



Rear Cross-Traffic Collision-Avoidance Assist may be limited when the vehicle is on a 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

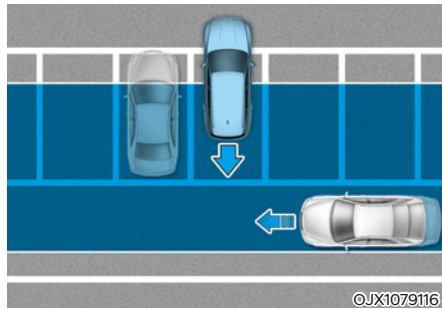


[A] : Structure, [B] : Wall

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.

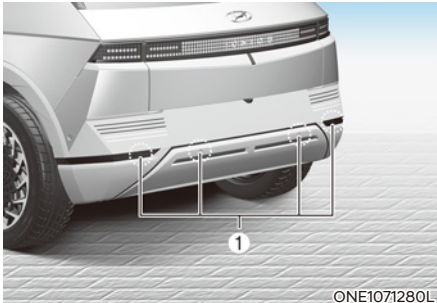
 **WARNING**

- When you are towing a trailer or another vehicle, we recommend that **Rear Cross-Traffic Collision-Avoidance Assist** is turned off due to safety reasons.
- **Rear Cross-Traffic Collision-Avoidance Assist** may not operate normally if interfered by strong electromagnetic waves.
- **Rear Cross-Traffic Collision-Avoidance Assist** may not operate for 15 seconds after the vehicle is started, or the rear corner radars are initialized.

REVERSE PARKING DISTANCE WARNING (PDW) (IF EQUIPPED)

Reverse Parking Distance Warning will help warn the driver if an obstacle is detected within a certain distance when the vehicle is moving in reverse at low speeds.

Detecting sensor



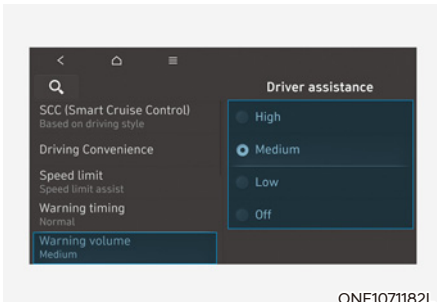
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[1] : Rear ultrasonic sensors

Refer to the picture above for the detailed location of the detecting sensors.

Reverse Parking Distance Warning settings

Warning Volume



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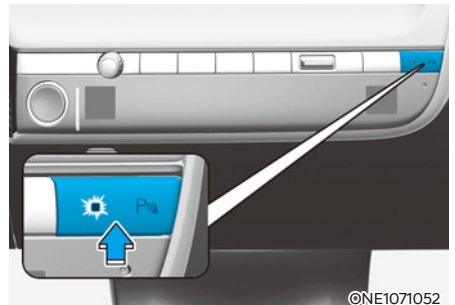
Select 'Driver Assistance → Warning Volume' from the infotainment system Settings menu to change the Warning Volume to 'High', 'Medium', or 'Low' for Reverse Parking Distance Warning.

However, even if 'Off' is selected, Warning Volume of Reverse Parking Distance Warning will not turn off but the volume will sound as 'Low'.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

Reverse Parking Distance Warning operation

Operating button






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Parking Safety button (if equipped)

- Press the Parking Safety (P) button to turn on Reverse Parking Distance Warning. Press the button again to turn off the function.
- When Reverse Parking Distance Warning is off (button indicator light off), if you shift the gear to R (Reverse), Reverse Parking Distance Warning will automatically turn on.

Reverse Parking Distance Warning

- Reverse Parking Distance Warning will operate when the gear is in R (Reverse).
- Reverse Parking Distance Warning detects a person, animal or object in the rear when the vehicle's rearward speed is below 10 km/h (6 mph).

Distance from object	Warning indicator when driving backward	Warning sound
60~120 cm (24~48 in.)		Buzzer beeps intermittently
30~60 cm (12~24 in.)		Beeps more frequently
within 30 cm (12 in.)		Beeps continuously

- The corresponding indicator will illuminate whenever each ultrasonic sensor detects a person, animal or object in its sensing range. Also an audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- The shape of the indicator in the illustration may differ from the actual vehicle.

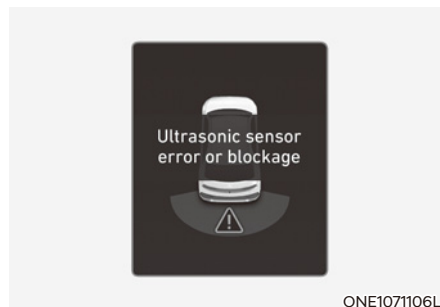
Reverse Parking Distance Warning malfunction and precautions

Reverse Parking Distance Warning malfunction

After starting the vehicle, a beep will sound when the gear is shifted to R (Reverse) to indicate Reverse Parking Distance Warning is operating normally.

However, if one or more of the following occurs, first check whether the ultrasonic sensor is damaged or blocked with foreign material. If it still does not work properly, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

- The audible warning does not sound.
- The buzzer sounds intermittently.
- The 'Ultrasonic sensor error or blockage' warning message appears on the cluster.





WARNING

- **Reverse Parking Distance Warning is a supplemental function. The operation of Reverse Parking Distance Warning can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the rear view before and while parking.**
- **Your new vehicle warranty does not cover any accidents or damage to the vehicle due to the malfunction of Reverse 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.**

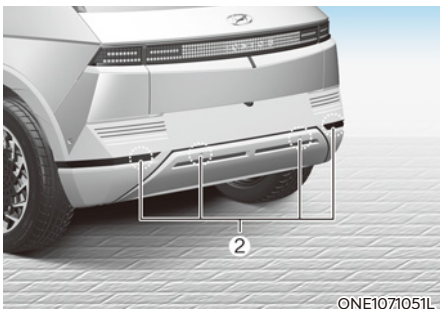
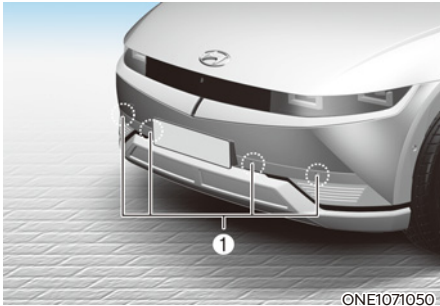
Limitations of Reverse Parking Distance Warning

- Reverse Parking Distance Warning may not operate normally when:
 - Moisture is frozen to the sensor
 - Sensor is covered with foreign material, such as snow or water (Reverse Parking Distance Warning will operate normally when such foreign material are removed.)
 - The weather is extremely hot or cold
The sensor or sensor assembly is disassembled
 - The surface of the sensor is pressed hard or an impact is applied 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
- Reverse 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
 - Driving on uneven road, gravel roads or bushes
 - Objects that generates ultrasonic waves are near the sensor
 - Installing the license plate differently from the original location
 - The vehicle bumper height or ultrasonic sensor installation has been modified
 - Attaching equipments or accessories around the ultrasonic sensors
- The following objects may not be detected:
 - Sharp or slim objects, such as ropes, chains or small poles.
 - 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
- Parking Distance Warning Indicators may be displayed differently from the actual detected location when the obstacle is located between the sensors.
- Parking Distance Warning indicator may not occur sequentially depending on vehicle speed or obstacle shape.
- If Reverse Parking Distance Warning needs repair, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

FORWARD/REVERSE PARKING DISTANCE WARNING (PDW) (IF EQUIPPED)

Forward/Reverse Parking Distance Warning will help warn the driver if an obstacle is detected within a certain distance when the vehicle is moving forward or in reverse at low speeds.

Detecting sensor



- [1] : Front ultrasonic sensors,
- [2] : Rear ultrasonic sensors

Refer to the picture above for the detailed location of the detecting sensors.

Forward/Reverse Parking Distance Warning settings

Warning Volume

Select 'Driver Assistance → Warning Volume' from the cluster or infotainment system Settings menu to change the Warning Volume to 'High', 'Medium', or 'Low' for Forward/Reverse Parking Distance Warning.

However, even if 'Off' is selected, the Warning Volume of Forward/Reverse Parking Distance Warning will not turn off but the volume will sound as 'Low'.

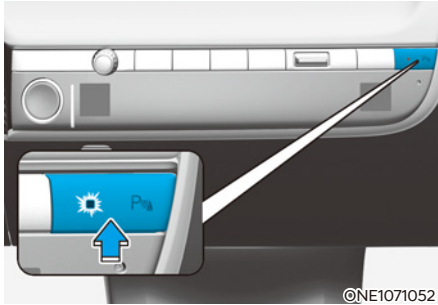
If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

Parking Distance Warning Auto On

To use Parking Distance Warning Auto On function, select 'Driver Assistance → Parking Safety → Parking Distance Warning Auto On' from the cluster or infotainment system Settings menu.




Forward/Reverse Parking Distance Warning operation

Operating button






Parking Safety button

- Press the Parking Safety (P \updownarrow) button to turn on Forward/Reverse Parking Distance Warning. Press the button again to turn off the function.
 - When Forward/Reverse Parking Distance Warning is off (button indicator light off), if you shift the gear to R (Reverse), Forward/Reverse Parking Distance Warning will automatically turn on.
 - When Forward/Reverse Parking Distance Warning turns on, the button indicator light will turn on. If vehicle speed is above 20 km/h (12 mph), Forward/Reverse Parking Distance Warning will turn off (button indicator light off).
 - * If equipped with Reverse Parking Collision-Avoidance Assist or Remote Smart Parking Assist, Forward/Reverse Parking Distance Warning will turn off (button indicator light off) when vehicle speed is above 30 km/h (18 mph).
- ### Forward Parking Distance Warning
- Forward Parking Distance Warning will operate when one of the condition is satisfied.
 - 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 button indicator light is on
 - 'Parking Distance Warning Auto On' is selected from the Settings menu and the gear is in D (Drive)
 - Forward Parking Distance Warning detects a person, animal or object in front when the vehicle's forward speed is below 10 km/h (6 mph).
 - Forward Parking Distance Warning does not operate when the vehicle's forward speed is above 10 km/h (6 mph) even when the Parking Safety button indicator is on. Forward Parking Distance Warning will operate again when the vehicle's forward speed decreases below 10 km/h (6 mph) while the Parking Safety button indicator is on.
 - When 'Parking Distance Warning Auto On' is selected, the Parking Safety button indicator light stays on.
 - When 'Parking Distance Warning Auto On' is deselected, and the vehicle's forward speed is above 20 km/h (12 mph), the Parking Safety (P \updownarrow) button indicator will turn off. Although you drive below 10 km/h (6 mph), Forward Parking Distance Warning will not turn on.
 - * If equipped with Reverse Parking Collision-Avoidance Assist or Remote Smart Parking Assist, Forward/Reverse Parking Distance Warning will turn off when vehicle speed is above 30 km/h (18 mph).

Distance from object	Warning indicator when driving forward	Warning sound
60~100 cm (24~40 in.)		Buzzer beeps intermittently
30~60 cm (12~24 in.)		Beeps more frequently
within 30 cm (12 in.)		Beeps continuously

- The corresponding indicator will illuminate whenever each ultrasonic sensor detects a person, animal or object in its sensing range. Also an audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Distance from object	Warning indicator when driving backward	Warning sound
60~120 cm (24~48 in.)		Buzzer beeps intermittently
30~60 cm (12~24 in.)		Beeps more frequently
within 30 cm (12 in.)		Beeps continuously

- The corresponding indicator will illuminate whenever each ultrasonic sensor detects a person, animal or object in its sensing range. Also an audible warning will sound.
- When more than two objects are detected at the same time, the closest one will be warned with an audible warning.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Reverse Parking Distance Warning

- Reverse Parking Distance Warning will operate when the gear is in R (Reverse).
- Reverse Parking Distance Warning detects a person, animal or object in the rear when the vehicle’s rearward speed is below 10 km/h (6 mph).
- When the vehicle’s rearward speed is below 10 km/h (6 mph), both the front and rear ultrasonic sensors will detect objects. However, the front ultrasonic sensors can detect a person, animal or object when it is within 60 cm (24 in.) from the sensors.

Forward/Reverse Parking Distance Warning malfunction and precautions

Forward/Reverse Parking Distance Warning malfunction

After starting the vehicle, a beep will sound when the gear is shifted to R (Reverse) to indicate Forward/Reverse Parking Distance Warning is operating normally.

However, if one or more of the following occurs, first check whether the ultrasonic sensor is damaged or blocked with foreign material. If it still does not work properly, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

- The audible warning does not sound.
- The buzzer sounds intermittently.
- The 'Ultrasonic sensor error or blockage' warning message appears on the cluster.



WARNING

- Forward/Reverse Parking Distance Warning is a supplemental function. The operation of Forward/Reverse 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 accidents or damage to the vehicle due to the malfunction of Forward/Reverse 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.

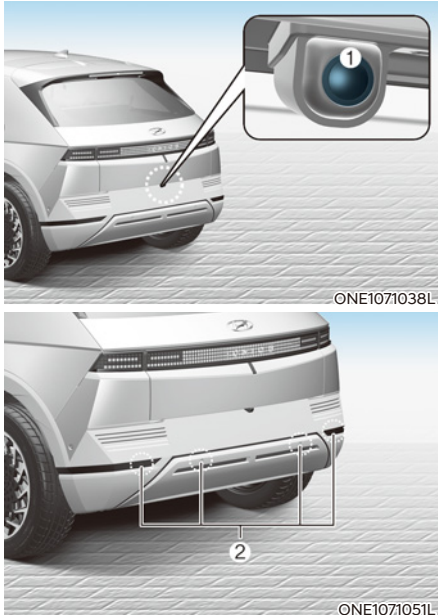
Limitations of Forward/Reverse Parking Distance Warning

- Forward/Reverse Parking Distance Warning may not operate normally when:
 - Moisture is frozen to the sensor
 - Sensor is covered with foreign material, such as snow or water (Forward/Reverse Parking Distance Warning will operate normally when such foreign material are removed.)
 - The weather is extremely hot or cold
 - The sensor or sensor assembly is disassembled
 - The surface of the sensor is pressed hard or an impact is applied 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
- Forward/Reverse 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
 - Driving on uneven road, gravel roads or bushes
 - Objects that generates ultrasonic waves are near the sensor
- Installing the license plate differently from the original location
- The vehicle bumper height or ultrasonic sensor installation has been modified
- Attaching equipments or accessories around the ultrasonic sensors
- The following objects may not be detected:
 - Sharp or slim objects, such as ropes, chains or small poles.
 - 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
- Parking Distance Warning Indicators may be displayed differently from the actual detected location when the obstacle is located between the sensors.
- Parking Distance Warning indicator may not occur sequentially depending on vehicle speed or obstacle shape.
- If Forward/Reverse Parking Distance Warning needs repair, we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

REVERSE PARKING COLLISION-AVOIDANCE ASSIST (PCA) (IF EQUIPPED)

Reverse Parking Collision-Avoidance Assist will warn the driver or assist with braking to help reduce the possibility of collision with a pedestrian or an object when backing up.

Detecting sensor



[1] : Rear view camera,

[2] : Rear ultrasonic sensors

Refer to the picture above for the detailed location of the detecting sensors.

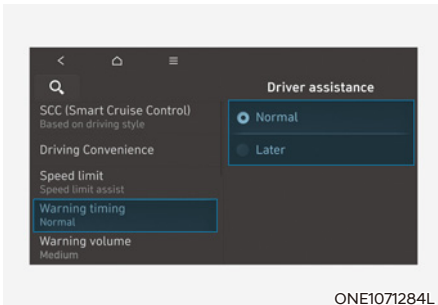
Reverse Parking Collision-Avoidance Assist settings

Setting features

Parking Safety

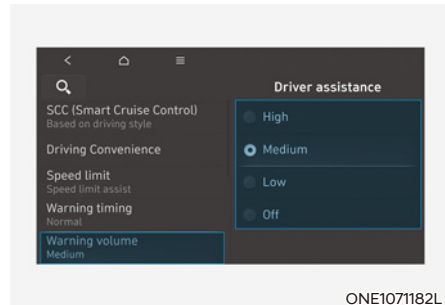
With the vehicle on, select or deselect 'Driver Assistance → Parking Safety' from the Settings menu to set whether or not to use each function.

- If 'Rear Active Assist' (or 'Active rear assist') is selected, Reverse Parking Collision-Avoidance Assist will warn the driver and assist with braking when a collision with a pedestrian or an object is imminent.
- If 'Rear Warning Only' (or 'Rear warning only') is selected, Reverse Parking Collision-Avoidance Assist will warn the driver when a collision with a pedestrian or an object is imminent. Braking will not be assisted.
- If 'Off' is selected, Reverse Parking Collision-Avoidance Assist will turn off.
- If Parking Safety (P_{SA}) button is pressed more than 2 seconds, 'Rear Active Assist' or 'Rear Warning Only' can be turned on or off.
- Whenever the vehicle is restarted, 'Rear Active Assist' is automatically selected.



Warning Timing

With the vehicle on, select 'Driver Assistance → Warning Timing' from the Settings menu to change the initial warning activation time for Reverse Parking Collision-Avoidance Assist. If you change the Warning Timing, the warning time of other Driver Assistance systems may change.



Warning Volume

With the vehicle on, select 'Driver Assistance → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' or 'Off' for Reverse Parking Collision-Avoidance Assist.

However, even if 'Off' is selected, the volume will not turn off but the volume will sound as 'Low'.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

Reverse Parking Collision-Avoidance Assist operation

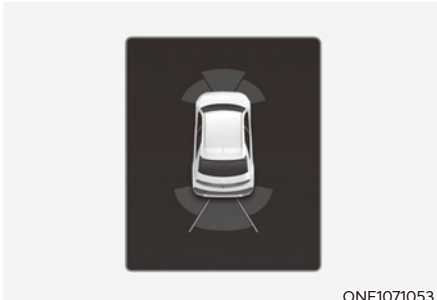
Operating conditions

If 'Rear Active Assist' or 'Rear Warning Only' is set from the Settings menu, Reverse Parking Collision-Avoidance Assist will be in the ready status when the following conditions are satisfied:

- The tailgate is closed
- The gear is shifted to R (Reverse)
- Vehicle speed is below 10 km/h (6 mph)
- Reverse Parking Collision-Avoidance Assist components such as the 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.

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



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Rear Active Assist

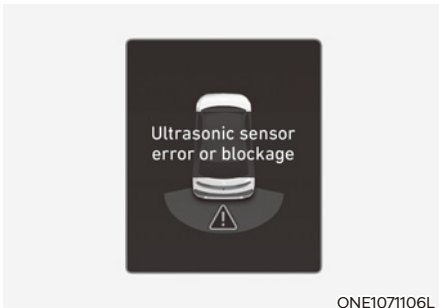
- If Reverse Parking Collision-Avoidance Assist detects a risk of collision with a pedestrian or an object, Reverse Parking Collision-Avoidance Assist will warn the driver with an audible warning and warning message on the cluster. When Rear View Monitor is operating, a warning will appear on the infotainment system screen.
- If Reverse Parking Collision-Avoidance Assist detects an imminent collision with a pedestrian or an object behind the vehicle, Reverse Parking Collision-Avoidance Assist will assist you with braking. The driver needs to pay attention as the brake assist will end within 5 minutes. The driver must immediately depress the brake pedal and check vehicle surroundings.
- Brake control will end when:
 - The gear is shifted to P (Park) or D (Drive).
 - The driver depresses the brake pedal with sufficient power
 - Braking assist has last for approximately 5 minutes, the Electronic Parking Brake (EPB) is engaged at the brake assist is released
- The warning will turn off when:
 - The driver shifts the gear to P (Park), N (Neutral), or D (Drive)

Rear Warning Only

- If Reverse Parking Collision-Avoidance Assist detects a risk of collision with a pedestrian or an object, Reverse Parking Collision-Avoidance Assist will warn the driver with an audible warning and warning message on the cluster. When Rear View Monitor is operating, a warning will appear on the infotainment system screen.
- If 'Rear Warning Only' is selected, braking will not be assisted.
- The warning will turn off when the gear is shifted to P (Park), N (Neutral) or D (Drive).

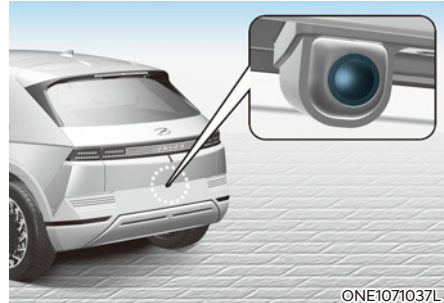
Reverse Parking Collision-Avoidance Assist malfunction and limitations

Reverse Parking Collision-Avoidance Assist malfunction



When Reverse Parking Collision-Avoidance Assist or other related functions are not working properly, the 'Check Parking Safety system' warning message will appear on the cluster, and Reverse Parking Collision-Avoidance Assist will turn off automatically. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

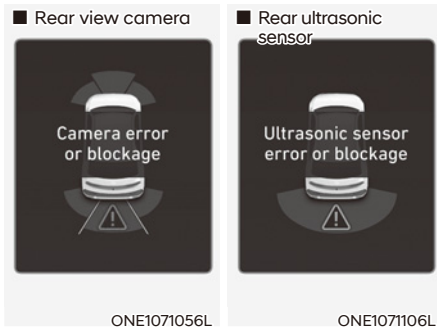
Reverse Parking Collision-Avoidance Assist disabled



The rear view camera is used as a detecting sensor to detect pedestrians. If the camera lens is covered with foreign material, such as snow or rain, it may adversely affect camera performance and Reverse Parking Collision-Avoidance Assist may not operate normally. Always keep the camera lens clean.



The rear ultrasonic sensors are located inside the rear bumper to detect objects in the rear area. If the sensors are covered with foreign material, such as snow or rain, it may adversely affect sensor performance and Reverse Parking Collision-Avoidance Assist may not operate normally. Always keep the rear bumper clean.



The 'Camera error or blockage' or 'Ultrasonic sensor error or blockage' warning message will appear on the cluster if the following situations occur:

- The 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 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:

- Any non-factory equipment or accessory is installed
- Your vehicle is unstable due to an accident or other causes
- Bumper height or rear ultrasonic sensor installation has been modified
- Rear view camera or rear ultrasonic sensor(s) is damaged
- Rear view camera or the rear ultrasonic sensor(s) is stained with foreign material, such as snow, dirt, etc.
- Rear view camera is obscured by a light source or by inclement weather, such as heavy rain, fog, snow, etc.
- 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 engines or truck air brakes, are near your vehicle
- An ultrasonic sensor with similar frequency is near your vehicle
- There is ground height difference between the vehicle and the pedestrian
- The image of the pedestrian in the rear view camera is indistinguishable from the background

- 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 for Reverse Parking Collision-Avoidance Assist 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, pole, 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
- A wall is behind the pedestrian or the object
- The object is not located at the rear center of your vehicle
- The object is not parallel to the rear bumper
- The road is slippery or inclined
- The driver backs up the vehicle immediately after shifting to R (Reverse)
- The driver accelerates or circles the vehicle

Reverse Parking Collision-Avoidance Assist may unnecessarily warn the driver or assist with braking even if there are no pedestrians or objects under the following circumstances:

- Any non-factory equipment or accessory is installed
- Your vehicle is unstable due to an accident or other causes
- Bumper height or rear ultrasonic sensor installation has been modified
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Rear view camera or the rear ultrasonic sensor(s) is stained with foreign material, such as snow, dirt, etc.
- The pattern on the road is mistaken for a pedestrian
- There is shadow or light reflecting on the ground
- Pedestrians or objects are around the path of the vehicle
- Objects generating excessive noise, such as vehicle horns, loud motorcycle engines or truck air brakes, are near your vehicle
- Your vehicle is backing towards a narrow passage or parking space
- Your vehicle is backing towards an uneven road surface, such as an unpaved road, gravel, bump, gradient, etc.
- A trailer or carrier is installed on the rear of your vehicle
- An ultrasonic sensor with similar frequency is near your vehicle



WARNING

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

- Always pay extreme caution while driving. The driver is responsible for controlling the brake for 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 backing up 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 Reverse 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, Reverse Parking Collision-Avoidance Assist warning may not sound.
- Reverse Parking Collision-Avoidance Assist may not work properly if the bumper has been damaged, replaced or repaired.
- Reverse Parking Collision-Avoidance Assist may not operate normally if interfered by strong electromagnetic waves.
- Playing the vehicle audio system at high volume may prevent passengers from hearing Reverse Parking Collision-Avoidance Assist warning sounds.
- Turn off Reverse Parking Collision-Avoidance Assist when towing a trailer. If towing and moving in reverse, 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 rear view camera and rear ultrasonic sensors clean.
- Do not use any cleanser containing acid or alkaline detergents when cleaning the rear view camera lens. Use only a mild soap or neutral detergent, and rinse thoroughly with water.
- Do not spray the rear view camera or the rear ultrasonic sensors or their surrounding area directly with a high pressure washer. It may cause the rear view camera or the rear ultrasonic sensors to malfunction.
- Do not apply objects, such as a bumper sticker or a bumper guard, near the rear view camera or rear ultrasonic sensors or apply paint to the bumper. Doing so may adversely affect the performance of Reverse Parking Collision-Avoidance Assist.
- Never disassemble or apply impact on the rear view camera or the rear ultrasonic sensors components.
- Do not apply unnecessary force on the rear view camera or the rear ultrasonic sensors. Reverse Parking Collision-Avoidance Assist may not operate properly if the rear view camera or the rear ultrasonic sensor(s) is forcibly moved out of proper alignment. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.



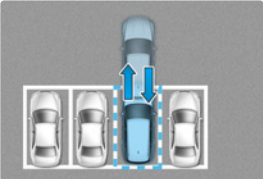
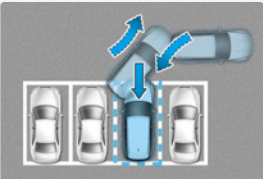
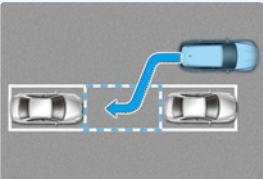
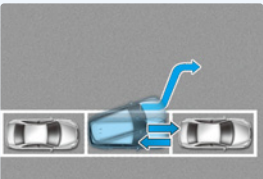
Information

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

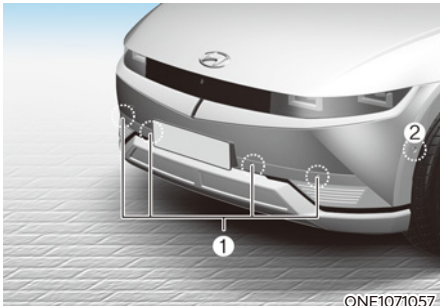
REMOTE SMART PARKING ASSIST (RSPA) (IF EQUIPPED)

Remote Smart Parking Assist uses vehicle sensors to help the driver park and exit parking spaces remotely from outside the vehicle by controlling the steering wheel, vehicle speed and gearshifts.

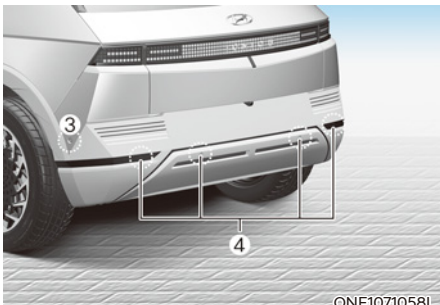
Function	Description
Remote Operation	<p>Remotely moving forward or backward</p>  <p>OJX1079037</p>
Smart Parking or Remote Smart Parking	<p>Perpendicular reverse parking</p>  <p>OJX1079034</p>
	<p>Parallel reverse parking</p>  <p>OJX1079035</p>
Smart Exit	<p>Parallel forward exit</p>  <p>OJX1079036</p>

- Remote Smart Parking and Remote Operation function may be operated from outside the vehicle using the smart key.
- Smart Parking and Remote Smart Parking function may be operated from inside the vehicle.
- Smart Parking and Remote Smart Parking function helps the driver with perpendicular reverse parking and parallel reverse parking.
- Smart Exit function helps the driver with parallel forward exit.
- When Remote Smart Parking Assist operates, Parking Distance Warning, Rear View monitor and Surround View Monitor will also operate. For more details, refer to “Parking Distance Warning (PDW)”, “Rear View Monitor (RVM)” and “Surround View Monitor (SVM)” sections in this chapter.

Detecting sensors



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- [1] : Front ultrasonic sensors,
- [2] : Front corner ultrasonic sensors,
- [3] : Rear corner ultrasonic sensors,
- [4] : Rear ultrasonic sensors

Refer to the picture above for the detailed location of the detecting sensors.

CAUTION

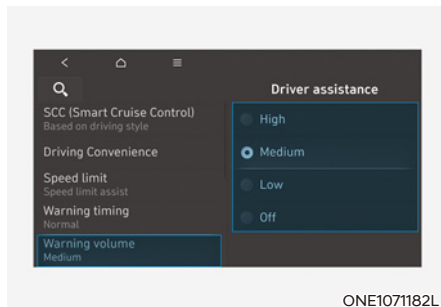
Take the following precautions to maintain optimal performance of the detecting sensors:

- Never disassemble the detecting sensor or sensor assembly, or apply any impact on it.
- If the detecting sensors need repair, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

- Remote Smart Parking Assist may malfunction if the vehicle bumper height or ultrasonic sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- When the ultrasonic sensor is frozen or stained with snow, dirt, or water, the sensor may not operate until the stains are removed using a soft cloth.
- Do not push, scratch or strike the ultrasonic sensor. Sensor damage could occur.
- Do not spray the ultrasonic sensors or its surrounding area directly with a high pressure washer.

Remote Smart Parking Assist settings

Settings features



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Warning Volume

With the vehicle on, select 'Driver Assistance → Warning Volume' from the Settings menu to change the Warning Volume to 'High', 'Medium', 'Low' for Remote Smart Parking Assist.






However, even if 'Off' is selected, the volume will not turn off but the volume will sound as 'Low'.

If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

Remote Smart Parking Assist operation

Remote Smart Parking Assist button



Location	Name	Symbol	Description
Inside vehicle	Parking/View button		<ul style="list-style-type: none"> Press and hold the Parking/View button to turn on Remote Smart Parking Assist. Also, Forward/Backward Parking Distance warning will automatically turn on. However, functions may differ depending on the situations. Refer to each function's description for more details in the following pages. Press and hold the Parking/View button while Smart Parking or Smart Exit function is on to operate the function.
	Parking Safety button		<ul style="list-style-type: none"> Press the Parking Safety button while Remote Smart Parking Assist is operating to end Remote Smart Parking Assist operation.
Smart key	Remote Start button		<ul style="list-style-type: none"> 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		<ul style="list-style-type: none"> When using Remote Smart Parking function, regardless of which direction button is pressed, parking is supported while the button is pressed.
	Backward button		<ul style="list-style-type: none"> When using the Remote Operation function, the vehicle moves in the direction of the button while the button is pressed.

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

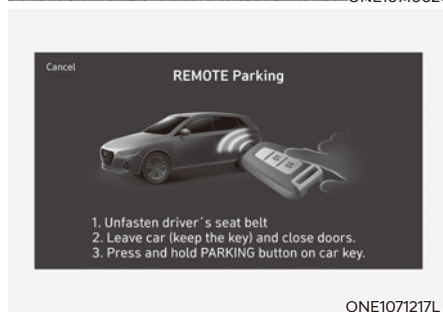
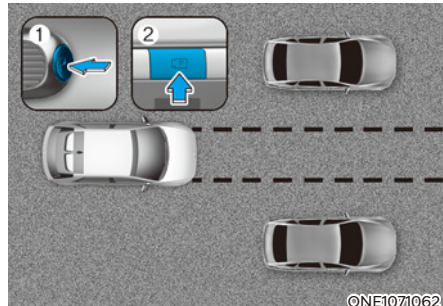
1. Getting ready to remotely move forward and backward

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.
- For more details on remotely starting the vehicle, refer to “Remote Start” section in chapter 6.

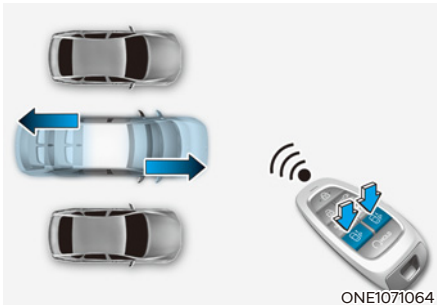


Method (2) Using the function with vehicle on

- (1) Park the vehicle in front of the space where you want to use Remote Operation function, and shift the gear to P (Park).
- (2) Press and hold the Parking/View (P) button to turn on Smart Parking Assist. A message 'Under Remote Control' will appear on the infotainment system screen.
- (3) Get out of the vehicle with the smart key and close all doors.

- 'Agree' must be selected on the infotainment system screen and the infotainment system has to operate properly to use Remote Operation function.
- Method (2) can be used after the vehicle has been driven above 5 km/h (3 mph).
- If the function is turned on again after parallel parking is completed by Remote Smart Parking Assist, Remote Operation function can be used with Method (2).

2. Remotely moving forward and backward



- (1) Press and hold one of the Forward (⏩) or Backward (⏪) 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.

- (2) While Remote Operation function is operating, if you do not hold down the Forward (⏩) or Backward (⏪) button, the vehicle will stop and function control will pause. The function will start operating again when the button is pressed and held again.
- (3) When the vehicle reaches the target location, release the smart key Forward or Backward button.
- (4) When the driver gets in the vehicle with the smart key, a message will appear informing the driver Remote Operation function is complete on the infotainment system screen and the vehicle will remain on.

In addition, when the Remote Start (⏻) button is pressed on the smart key from outside the vehicle, a message will appear informing the driver Remote Operation function is complete and the vehicle will turn off.

- 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.
- When remotely moving forward or backward is completed, the vehicle will automatically shift to P (Park) and engage EPB (Electronic Parking Brake).



CAUTION

- **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 vision roof (or solar roof), 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

- * 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 (approximately 4m (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 screen guides the driver using method 2.
- Shift the gear except to P (Park) while the infotainment system screen guides the driver using method 2.
- Press the Parking Safety (P) button or select 'Cancel' on the infotainment system screen.
- Press the Remote Start (HOLD) 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 (Excluding start button)
- Blind-Spot 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)

When Remote Operation function is paused, the vehicle will stop. If the condition that made the function to pause disappears, the function may operate again.

The function will cancel in the following conditions when:

- The steering wheel is steered
- The gear is shifted while the vehicle is moving
- Operating EPB while the vehicle is moving
- The vehicle 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
- Approximately 3 minutes and 50 seconds have past 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 normally
- 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
- The Charging door opens
- The EV mode is utility mode

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

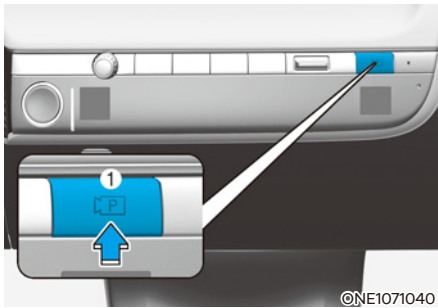
Smart Parking, Remote Smart Parking

Operating order

Parking function operates in the following order:

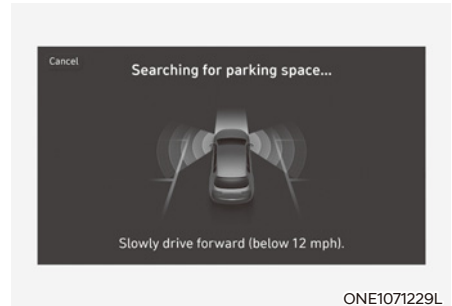
1. Getting ready for parking
 2. Searching for parking space
 3. Select parking type and operating mode
 4. Smart Parking
 5. Remote Smart Parking
- Parking function includes Smart Parking and Remote Smart Parking.

1. Getting ready for parking



- (1) With the vehicle turned on, depress the brake pedal and shift the gear to D (Drive) or N (Neutral).
 - (2) Press and hold the Parking/View (P) button to turn on Remote Smart Parking Assist.
- 'Agree' must be selected on the infotainment system screen and the infotainment system has to operate properly to use Parking function.
 - If you drive above 5 km/h (3 mph) with the vehicle on, you may use the Parking function with the gear shifted to N (Neutral).

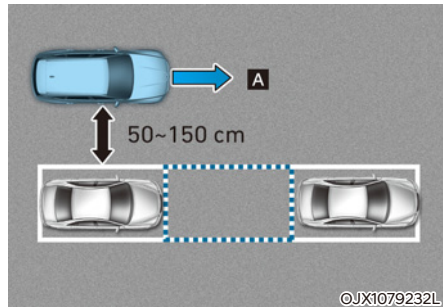
2. Searching for parking space



- (1) Slowly drive forward maintaining the distance of approximately 100 cm (40 in.) from the parked vehicles.
- (2) When searching for a parking space is complete, a message will appear on the infotainment system screen with an audible sound to notify the search is complete.
- (3) 'Select Parking Type' will be displayed on the infotainment system screen and the selected parking space will appear on Top View screen of Surround View Monitor.

- Remote Smart Parking Assist searches for parking spaces that are next to parked vehicles, or parking spaces with parked vehicles in front or rear.
- While searching for a parking space, when vehicle speed is above 20 km/h (12 mph), a message will appear on the infotainment system screen informing you to slow down. When vehicle speed is above 30 km/h (18 mph), Parking function will turn off.
- Searching for a parking space will be completed when there is enough space to move the vehicle in addition to the parking space.
- Even if an audible sound is heard to notify that searching for a parking space is complete, search completion can be canceled immediately depending on surroundings.

i Information



[A] : Searching for parking space

- **If the distance is below 50 cm (20 in.) or over 150 cm (59 in.), Remote Smart Parking Assist may not be able to search for a parking space.**
- **If you do not maintain a certain distance from the parked vehicle, the performance to search for a parking space may reduce.**
- **Even if a diagonal parking space is searched as a parking space, parking is not assisted normally.**
- **Due to abnormal performance of the ultrasonic sensor or the influence of the surroundings, Parking function may not be able to search for a parking space even if there is a parking space, or may search for a space that is not suitable for parking.**

3. Select parking type and operating mode



ONE1071218L

- (1) Parking type – Perpendicular reverse (Left/Right), Parallel reverse (Left/Right)

With the vehicle stopped by depressing the brake pedal, touch the infotainment system screen to select the desired parking type.

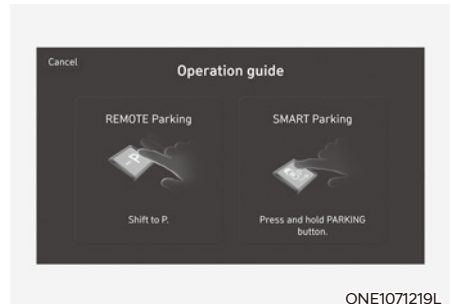
- If you continue to drive without stopping after the parking type selection screen appears, Remote Smart Parking Assist will return to the previous stage and search for a parking space.
- If Parking function is canceled unintentionally by pressing the Parking/View (P) button before the parking type is selected, you can return to the parking type selection stage by pressing and holding the button again while the vehicle is stopped.



CAUTION

Before selecting the Parking type, the driver should check whether the parking space is suitable.

If the searched parking space by Remote Smart Parking Assist is narrow or unsuitable for parking, do not select the Parking type and move the vehicle to search for another parking space.



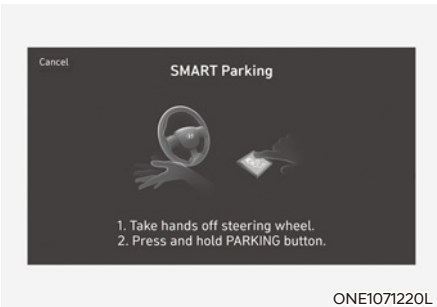
ONE1071219L

- (2) Operating mode – Remote Parking, Smart Parking

After selecting a parking type, the infotainment system screen will guide you with Remote Smart Parking function and Smart Parking function. Follow the instructions to operate Remote Smart Parking Assist.

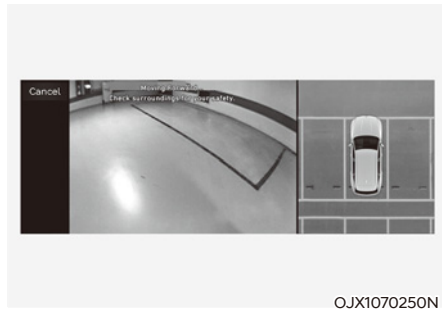
- Operating instructions will be displayed on the screen for each desired function you select.
- Do not take your foot off the brake pedal during the Parking function guide. When the vehicle moves, Remote Smart Parking Assist will turn off.

i Information



If Remote Smart Parking Assist cannot activate Remote Smart Parking function, only the Smart Parking guide will be displayed on the infotainment system screen.

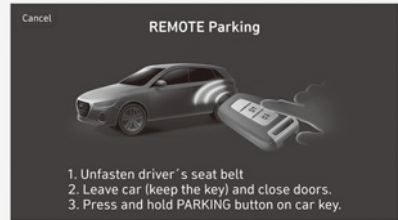
4. Smart Parking



- (1) Press the Parking/View (P) button when the vehicle is stopped by depressing the brake pedal. When the brake pedal is released, Remote Smart Parking Assist will automatically control the steering wheel, vehicle speed and gearshift.
- (2) While Smart Parking function is operating, if you do not hold down the Parking/View button, the vehicle will stop and function control will pause. The function will start operating again when the Parking/View button is pressed and held again.
- (3) When the vehicle reaches the target parking position, a message will appear on the infotainment system screen to inform you that parking is complete.

- Smart Parking function will not operate if the door is open or the seat belt is not fastened.
- The parking location indicator is displayed on Surround View Monitor screen and is displayed until the vehicle enters the parking space for the first time by Smart Parking function.
- Vehicle speed can be adjusted by depressing the brake pedal while Smart Parking function is operating. However, the vehicle does not accelerate even when the accelerator pedal is depressed.
- Depending on parking environments, if the vehicle is stopped by a stopper, parking may be completed.
- If you need to change the vehicle's position or location, manually complete parking your vehicle.

5. Remote Smart Parking



ONE1071217L

- (1) Shift the gear to P (Park), get out of the vehicle with the smart key, and close all doors.
- (2) Press and hold one of the Forward (⏪) or Backward (⏩) button on the smart key. Remote Smart Parking Assist will automatically control the steering wheel, vehicle speed and gearshift.
- (3) While Remote Smart Parking function is operating, if you do not hold down the Forward (⏪) or Backward (⏩) button, the vehicle will stop and function control will pause. The function will start operating again when the button is pressed and held again.
- (4) When the vehicle reaches the target parking position, a message will appear on the infotainment system screen to inform you that parking is complete. The vehicle will automatically shift to P (Park), engage EPB (Electronic Parking Brake) and the vehicle will turn off.

- When operating Remote Smart Parking function, make sure all smart keys are outside of the vehicle.
- Remote Smart Parking 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 Remote Operation 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.
- The parking location indicator is displayed on Surround View Monitor screen and is displayed until the vehicle enters the parking space for the first time by Remote Smart Parking function.
- Depending on parking environments, if the vehicle is stopped by a stopper, parking may be completed.
- If you need to change the vehicle's position or location, manually complete parking your vehicle.



CAUTION

- **When using Remote Smart Parking function, make sure that all passengers have gotten out of the vehicle.**
- **After ending or turning off Remote Smart Parking function, before leaving the vehicle, close windows and vision roof (or solar roof), and make sure the vehicle is off before locking the doors.**

How to turn off Parking function while operating

- Press the Parking/View (P) button in the following stage:
 - Searching for parking space
 - Select parking type
- Shift the gear to R (Reverse) in the following stage:
 - Searching for parking space
 - Select parking type
 - Select operating mode
- Press the Parking Safety (P) button or select 'Cancel' on the infotainment system screen to turn off Parking function.
- While Smart Parking function is operating:
 - If the vehicle is stopped by depressing the brake pedal, and the gear is shifted, Parking function will turn off. At this time, EPB (Electronic Parking Brake) will not be engaged.
- While Remote Smart Parking function is operating:
 - Press the Remote Start (HOLD) button on the smart key. Parking function will turn off.
 - Get on the vehicle with the smart key. Parking function will turn off. At this time, the vehicle will remain on.

Parking function operation status

- Smart Parking function

Operation status	Turn signal
Under control	The turn signal of the parking direction blinks until the first reverse is complete.

- Smart Parking function

Operation status	Smart key LED	Hazard warning light	Turn signal
Under control	Green LED continuously blinks	-	The turn signal of the parking direction blinks until the first reverse is complete.
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	-

* 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 (approximately 4m (13 ft.)), the smart key LED will not illuminate or blink. Use the smart key within the operating range.

The function will pause in the following conditions when:

- Smart Parking
 - There is a pedestrian, animal or object in the direction the vehicle is moving
 - The door or tailgate is open
 - The driver's seat belt is not fastened
 - Blind-Spot Collision-Avoidance Assist or Rear-Cross Traffic Collision-Avoidance Assist operates while the vehicle is being controlled in the reverse direction
 - The Parking/View (P) button is not continuously pressed
 - The vehicle is stopped by depressing the brake pedal
- Remote Smart Parking
 - 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
 - Blind-Spot Collision-Avoidance Assist or Rear-Cross Traffic Collision-Avoidance Assist operates while the vehicle is being controlled in the reverse direction

When Parking function is paused, the vehicle will automatically stop. If the condition that made the function to pause disappears, the function may operate again.

The function will cancel in the following conditions when:

- Smart Parking
 - 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 driver opens the door with the seatbelt unfastened
 - Rapid acceleration occurs
 - Vehicle skid occurs
 - The wheel is stuck by an obstacle and cannot move
 - There are pedestrians, animals or objects at the front and rear of the vehicle at the same time
 - Approximately 3 minutes and 50 seconds have past after Smart Parking function has started to operate
 - The slope of the road exceeds the operational range
 - The function is paused for more than 1 minute
 - The steering wheel, gearshift, braking, and drive controls are not working normally
 - ABS, TCS or ESC system operates due to slippery road conditions
 - The Charging door opens
 - The EV mode is utility mode

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

- Remote Smart Parking
 - The steering wheel is steered
 - The gear is shifted
 - 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
 - There are pedestrians, animals or objects at the front and rear of the vehicle at the same time
 - Approximately 3 minutes and 50 seconds have past after Remote Smart Parking function has started to operate
 - The slope of the road exceeds the operational range
 - The function is paused for more than 1 minute
 - The steering wheel, gearshift, braking, and drive controls are not working normally
 - 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
 - The Charging door opens
 - The EV mode is utility mode

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

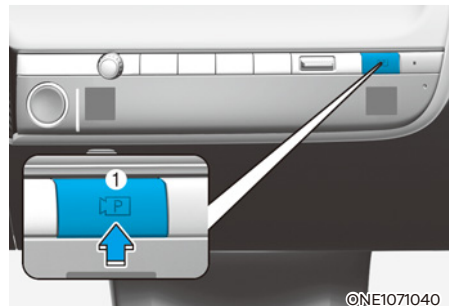
Smart Exit

Operating order

Smart Exit function operates in the following order:

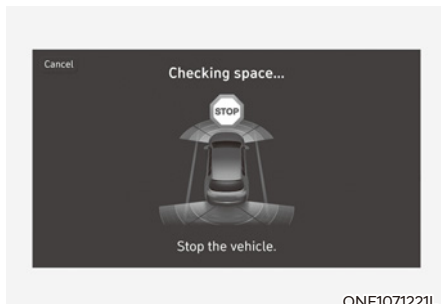
1. Getting ready for exit
2. Checking space
3. Select exit direction
4. Smart Exit

1. Getting ready for exit



- (1) With the vehicle turned on, depress the brake pedal and shift the gear to P (Park) or N (Neutral).
- (2) Press and hold the Parking/View (P) button to turn on Remote Smart Parking Assist.
 - 'Agree' must be selected on the infotainment system screen and the infotainment system has to operate properly to use Smart Smart Exit function.
 - Drive below 5 km/h (3 mph) with the vehicle on and shift the gear to N (Neutral), Smart Exit function can be used.
 - If the function is turned on again after parallel parking is completed by Remote Smart Parking Assist, Smart Exit function can be used.

2. Checking space



- (1) When the vehicle is stopped by depressing the brake pedal, the vehicle sensors will detect the distance from nearby objects and check for space to exit.
- (2) When checking for space is complete, a message will appear on the infotainment system screen with an audible sound to notify the search is complete.

WARNING

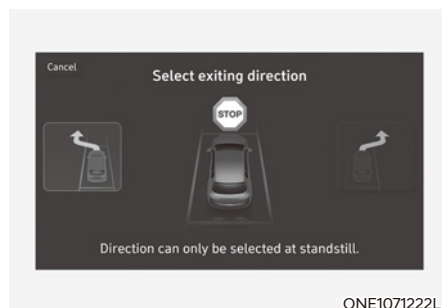
- While checking for space, if there is a risk of collision with pedestrian, animal or object in the direction of vehicle exit, for your safety, Smart Exit function can be turned off.
- Even if check for space is completed, objects in the blind spot area cannot be detected by the sensors. The driver must directly check the blind spot area and continue using the function.

Information

Due to abnormal performance of the ultrasonic sensor or the influence of the surroundings, Parking function may not be able to search for a parking space even if there is a parking space, or may search for a space that is not suitable for parking.

- The parked vehicle has objects attached to the bumper such as bumper guard, trailer hitch, etc.

3. Select exiting direction

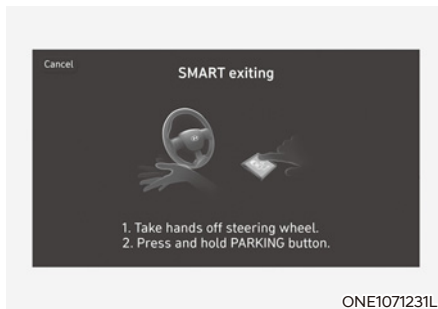



- (1) With the vehicle stopped by depressing the brake pedal, the infotainment system screen displays the possible directions for parallel exit.
- (2) Touch the infotainment system screen to select the desired exit direction.

CAUTION

- Before selecting the Exit Direction, the driver should check whether the space for exit is suitable.
- If the searched exit space by Remote Smart Parking Assist is narrow or unsuitable (surrounding vehicles are parked vertically, etc.), do not use the Smart Exit function.

4. Smart Exit



- (1) Press the Parking/View () button when the vehicle is stopped by depressing the brake pedal. When the brake pedal is released, Remote Smart Parking Assist will automatically control the steering wheel, vehicle speed and gearshift.
 - (2) While Smart Exit function is operating, if you do not hold down the Parking/View button, the vehicle will stop and function control will pause. The function will start operating again when the Parking/View button is pressed and held again.
 - (3) When the vehicle reaches the target exit location, a message will appear on the infotainment system screen to inform you that exit is complete.
- Smart Exit function will not operate if the door is open or the seat belt is not fastened.
 - Vehicle speed can be adjusted by depressing the brake pedal while Smart Exit function is operating. However, the vehicle does not accelerate even when the accelerator pedal is depressed.
 - If exit is completed while depressing the brake pedal, Smart Exit function will complete with the gear in D (Drive).
 - If exit is completed while depressing the accelerator pedal, you must take your foot off the accelerator pedal once for the accelerator pedal to operate.
 - If there is no vehicle operation such as depressing the brake pedal or accelerator pedal within 4 seconds after exit is complete, the vehicle will automatically shift to P (Park) and engage EPB (Electronic Parking Brake).
 - After Exit function is complete, always check the surroundings before driving.

Smart Exit operation status

Operation status	Turn signal
Under control	The turn signal of the exit direction blinks until the exit is complete or Smart Exit is cancelled.

How to turn off Smart function while operating

- Press the Parking/View (P) button in the following stage:
 - Checking space
 - Select exit direction
- Shift the gear to R (Reverse) in the following stage:
 - Checking space
 - Select exit direction
- Press the Parking Safety (P) button or select 'Cancel' on the infotainment system screen to turn off Exit function.
- While Smart Exit function is operating, if the vehicle is stopped by depressing the brake pedal, and the gear is shifted, Exiting function will turn off. At this time, EPB (Electronic Parking Brake) will not be engaged.

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 driver's seat belt is not fastened
- Blind-Spot Collision-Avoidance Assist or Rear-Cross Traffic Collision-Avoidance Assist operates while the vehicle is being controlled in the reverse direction
- The Parking/View (P) button is not continuously pressed
- The vehicle is stopped by depressing the brake pedal

When Exit function is paused, the vehicle will stop. If the condition that made the function to pause disappears, the function may operate again.

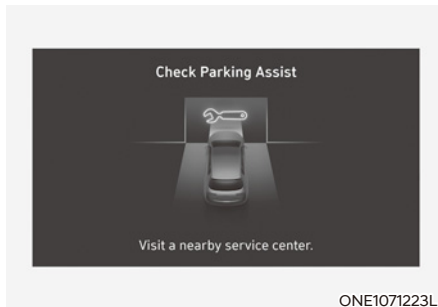
The function will cancel in the following conditions when:

- Smart Exit
 - 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 driver opens the door with the seatbelt unfastened
 - Rapid acceleration occurs
 - Vehicle skid occurs
 - The wheel is stuck by an obstacle and cannot move
 - There are pedestrians, animals or objects at the front and rear of the vehicle at the same time
 - Approximately 3 minutes and 50 seconds have past after Smart Exit function has started to operate
 - The slope of the road exceeds the operational range
 - The function was paused for more than 1 minute
 - The steering wheel, gearshift, braking, and drive controls are not working normally
 - ABS, TCS or ESC system operates due to slippery road conditions
 - The Charging door opens

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

Remote Smart Parking Assist malfunction and limitations

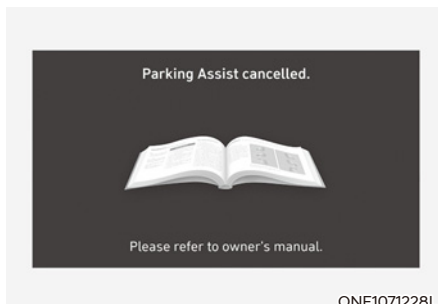
Remote Smart Parking Assist malfunction



ONE1071223L

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 screen. If the message appears, stop using Remote Smart Parking Assist, and we recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

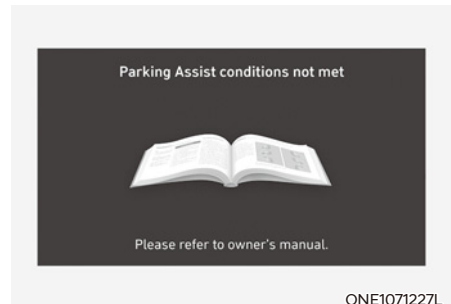


ONE1071228L

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 screen while parking your vehicle with Remote Parking Assist. Always look around and pay attention when using Remote Smart Parking Assist.



ONE1071227L

Remote Smart Parking Assist standby

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

It does not work even when the EV mode is in the Utility mode. For related information refer to Utility Mode in 'Foreword/Electric Vehicle System Overview'.

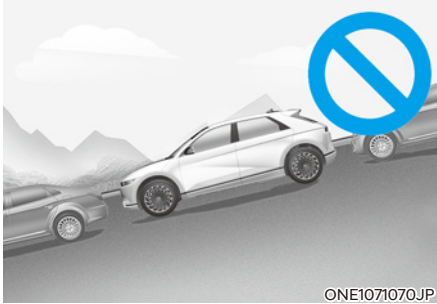
Limitations of Remote Smart Parking Assist

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.

- An object is attached to the steering wheel
- 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
- There is a problem with the wheel alignment
- 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

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

- Parking on inclines



Park manually when parking on inclines.

- Parking in snow



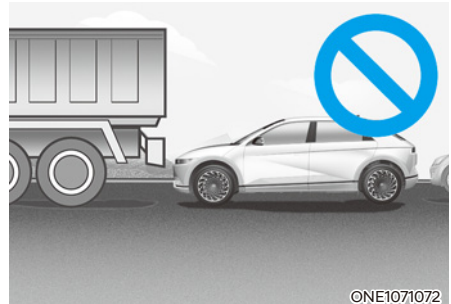
Snow may interfere with sensor operation, or Remote Smart Parking Assist may cancel if the road is slippery while parking.

- Parking on uneven road



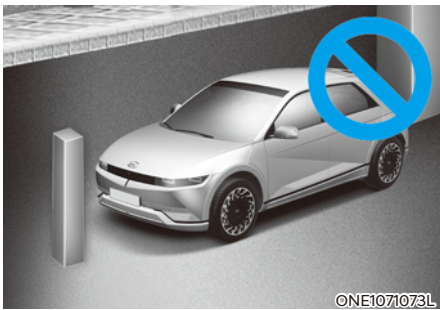
Remote Smart Parking Assist may cancel when the vehicle slips, or the vehicle cannot move due to road conditions such as pebbles or fragmented stones.

- Parking behind a truck



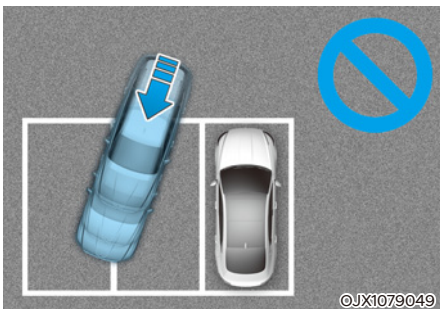
Do not use Remote Smart Parking Assist around vehicles with higher ground clearance, such as a bus, truck, etc. It may lead to an accident.

- Parking near a pillar



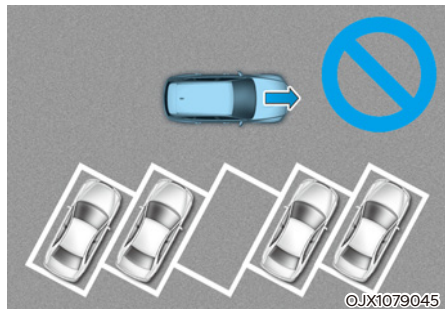
Remote Smart Parking Assist performance may reduce or collision with an obstacle may occur when there is a narrow object, circular pillar, square pillar, or a pillar surrounded by objects such as a fire extinguisher, etc., near the parking space. The driver should park the vehicle manually.

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



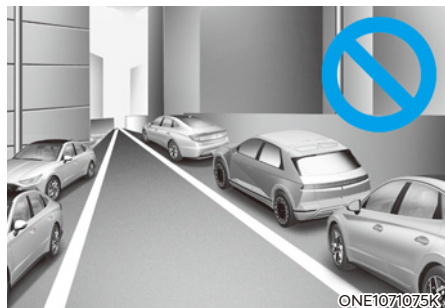
If Remote Smart Parking Assist is used, when parking in a parking space with a vehicle only on one side, your vehicle may cross the parking line to avoid the parked vehicle.

- Parking diagonal



Remote Smart Parking Assist does not provide diagonal parking. Even if your vehicle was able to enter the parking space, do not use Remote Smart Parking Assist because the function cannot operate normally.

- Leaving a parking space near a wall or parking in a narrow space



- Remote Smart Parking Assist may not operate properly when leaving a parking space that is narrow and near a wall. Always check for pedestrians, animals, objects while leaving.
- For your safety, Remote Smart Parking Assist does not search for parking spaces at areas with narrow parking spaces that are narrower than the minimum space required for 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 normally if the vehicle needs wheel alignment adjustment such as when the vehicle tilts to one side. We recommend that the vehicle be 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 cancelled depending on vehicle condition.

DECLARATION OF CONFORMITY (IF EQUIPPED)

Front radar

The radio frequency components (front radar) complies:

- For Israel

Ministry of Communication permit number : 51-71611

א. השימוש במגשיר פטור מרשיון הפעלה אלוטוסי
לא מוגן מהפרעות וללא הפרעה למערכות אחרות הפועלות בד"ן.
ב. רק "בפעולת בוק" לשימוש עצמי של הלקוח בלבד, הפיוד פטור מרשיון הפעלה אלוטוסי:
מתן "שרות בוק" לדג ל מחייב רשיון מיוחד ממשרד התקשורת.
ג. אסור להחליף את האנטנה המקורית של המגשיר, ולא לעשות בו כל שינוי סכנ אחר.


OANATEL351

- Commonwealth of Australia



OANATEL327

- For Europe and other Europe territories



Model : MRR-30

Hereby MRR-30 has been so constructed that it can be operated in at least one Member State without infringing applicable requirements of use of radio spectrum. (RED article 10.2)

Hereby, Mando Corp declares that the radio equipment type MRR-30 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following as next page.
(Case 1 : Include DoC in manual)
Case 2 : Website link

OANATEL344

■ For Taiwan



CCAF19LP2840T0

低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率，加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

第十五條 合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須符合合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

使用此產品時應避免影響附近雷達系統之操作

OANATEL308

■ For Serbia



OANATEL237

■ For Morocco

Numéro d'agrément : MR 22027 ANRT 2019
Date d'agrément : 2020-01-09

OANATEL238

■ For Moldova



OANATEL133

■ For Ukraine



26. Manufacturers should ensure that radio equipment is accompanied by instructions and safety information in accordance with the law on the use of languages.

Instructions should include the information necessary to use the radio equipment according to its purpose. Such information contains, in the presence of a description of the components and accessories, including software that allows the radio equipment to work for its intended purpose. Such instructions and safety instructions, as well as any labeling, must be clear, understandable and legible.

An instruction for radio equipment intended to emit radio waves must additionally contain:

- band (bands) of radio frequencies, in which (in which) the radio equipment operates;
- the maximum radiation power in the band (s) of radio frequencies, in which (in which) radio equipment is operating.

OANATEL134

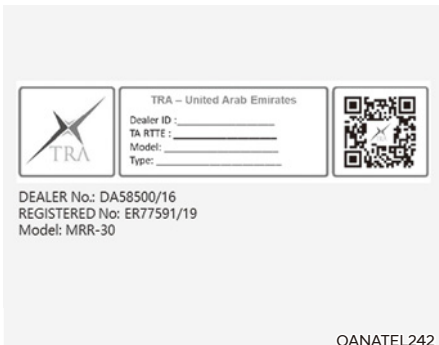
■ For Oman



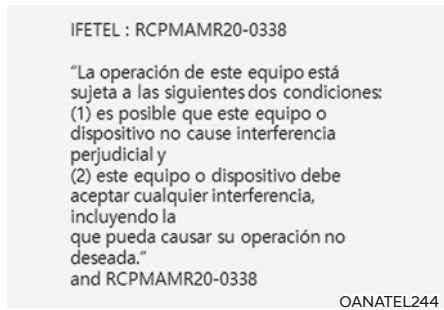
■ For Brazil



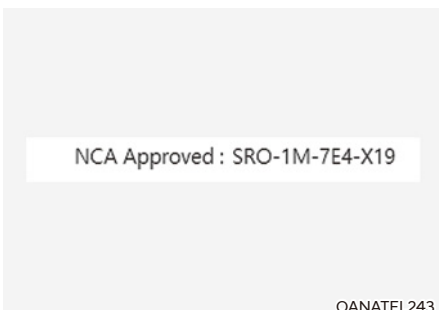
■ For United Arab Emirates



■ For Mexico



■ For Ghana



■ For Korea



■ For Argentina



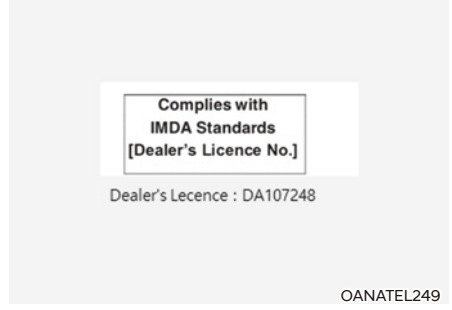
■ For Paraguay



■ For Philippines



■ For Singapore



■ For Malaysia



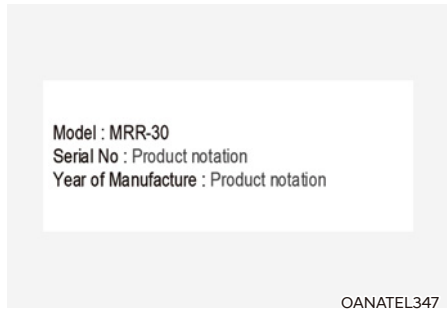
■ For Uzbekistan



■ For Russia



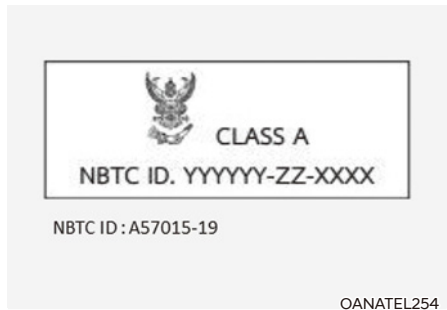
■ For Jordan



■ For Benin



■ For Thailand



Rear corner radar

The radio frequency components (Rear Corner Radar) complies:

■ For Thailand



OANATEL320

■ For Malaysia



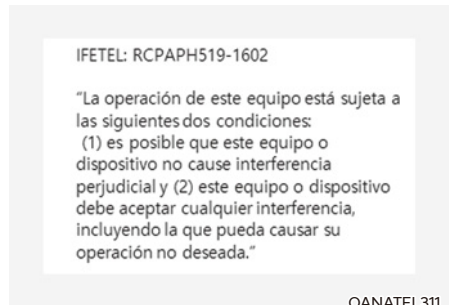
OANATEL317

■ For Singapore



OANATEL318

■ For Mexico



OANATEL311

■ For Ukraine



UA RF: IAPTV HSTR

справжнім (найменування виробника) заявляє, що тип радіобладнання (позначення типу радіобладнання) відповідає Технічному регламенту радіобладнання;

повний текст декларації про відповідність доступний на веб-сайті за такою адресою:
www.aptiv.com/automotive-homologation

OANATEL354

■ For Japan

This device is granted pursuant to the Japanese Radio Law under the grant ID n° : 203-JN1053. This device should not be modified (otherwise the granted designation number will become invalid).

本製品は、電波法に基づく特定無線設備の技術基準適合証明などを受けております。認証番号: 203-JN1053。本製品の改造は禁止されています。(適合証明番号などが無効となります。)

OANATEL356

■ Ghana

NCA approved: ZRO-M8-7E3-249

OANATEL313

■ Serbia and Montenegro



I61819

OANATEL315

■ For Israel

34. תיק מספר: 63-67459

א. השימוש במגשר הריש על בסיס "משגיח" ומסור מרשין הפעלה אלוהי. כלומר - לא מוגן מהפרעות אלא הפרעה למערכת אחרות הפועלת כך.

ב. רק "מערכת בוקר" לשימוש עקבי של הרכוש בלבד, היחיד כסור מרשין הפעלה אלוהי. ניתן "שידור בוקר" לבד ב מתייב מרשין ממשדיר התקשורת.

ג. מסור סולמליה את האנטנה המקורית של המגשר, ולא לשנות ב כל שיעו טכני אחר.

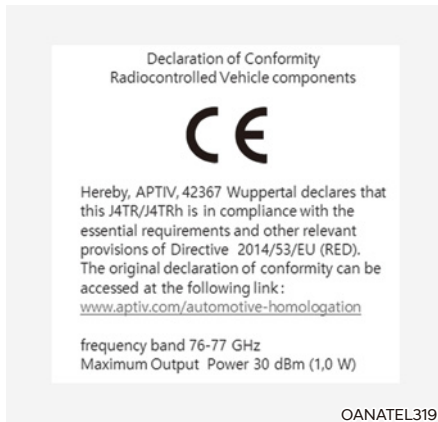
ד. האיסור הנ"ל תקף אך ורק עבור ציוד אלוהי, המעל "operating frequencies of the device" בתחום תדרים של "output power of the device" על אנו עלה על

OANATEL321

■ Republic of South Africa



■ For Europe and CE certified countries



■ For Korea



■ For China



■ For Brazil

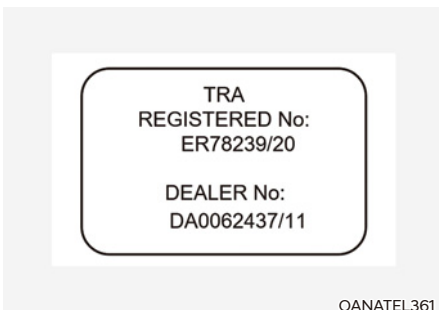


■ For Taiwan



OANATEL359

■ For United Arab Emirates



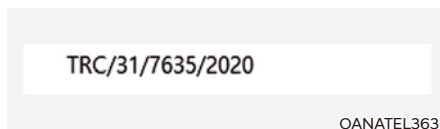
OANATEL361

■ For Paraguay



OANATEL316

■ For Jordan



OANATEL363

■ For Morocco



OANATEL364

■ For Australia

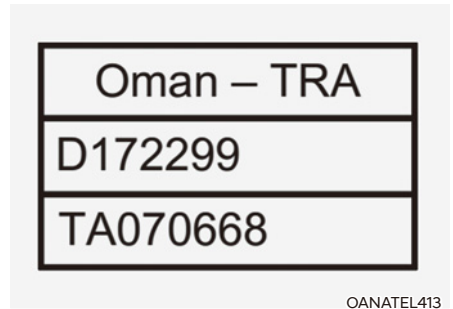


OANATEL327

■ For United Kingdom



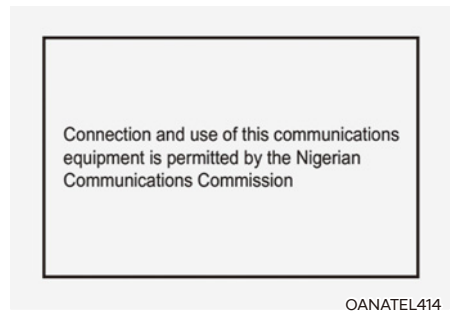
■ For Oman



■ For Indonesia



■ For Nigeria



■ For Parkistan



■ For Zambia



■ For Senegal

