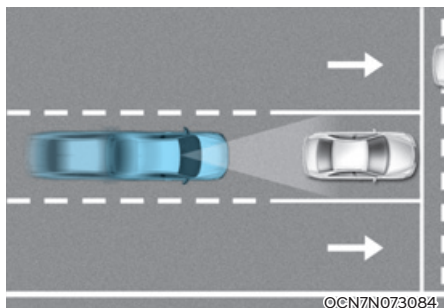


# 7. Driver Assistance System

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

- Driving Safety
  - Forward Collision-Avoidance Assist (FCA) (Front view camera only) ..... 7-2
  - Lane Keeping Assist (LKA)..... 7-14
  - Blind-Spot Collision-Avoidance Assist (BCA) ..... 7-20
  - Safe Exit Warning (SEW) (if equipped)..... 7-32
  - Manual Speed Limit Assist (MSLA) ..... 7-37
  - Intelligent Speed Limit Assist (ISLA) .....7-40
  - Driver Attention Warning (DAW) .....7-46
- Driving Convenience
  - Cruise Control (CC)..... 7-52
  - Lane Following Assist (LFA) ..... 7-56
- Parking Safety
  - Rear View Monitor (RVM).....7-60
  - Rear Cross-Traffic Collision-Avoidance Assist (RCCA) .....7-64
  - Forward/Reverse Parking Distance Warning (PDW) .....7-75
- Declaration of conformity .....7-80

## FORWARD COLLISION-AVOIDANCE ASSIST (FCA) (FRONT VIEW CAMERA ONLY)



Forward Collision-Avoidance Assist helps detect a vehicle, a powered two-wheeler, a pedestrian, or a cyclist ahead on the road and may warn you of a possible collision with a warning message on the instrument cluster and a warning sound. Also, Forward Collision-Avoidance Assist may assist with braking your vehicle to help reduce collision speed or avoid a collision.

### ***Detecting sensor***



[1] : Front view camera

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



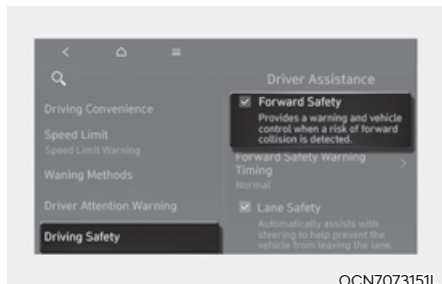
### **CAUTION**

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

- Never disassemble the detecting sensor or sensor assembly, or cause any damage to it.
- If the detecting sensors have been replaced or repaired, 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.
- If a trailer, carrier, etc., is installed, it may adversely affect the performance of detecting sensor or Forward Collision-Avoidance Assist may not operate.

## Forward Collision-Avoidance Assist Settings


### Forward Safety




OCN7073151L

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

If **Forward Safety** is selected, Forward Collision-Avoidance Assist will warn you with a warning message and an audible warning depending on the collision risk levels. Braking assist will be applied depending on the collision risk levels.

- If **Forward Safety** is deselected, Forward Safety will turn off. The warning light  will illuminate on the instrument cluster.

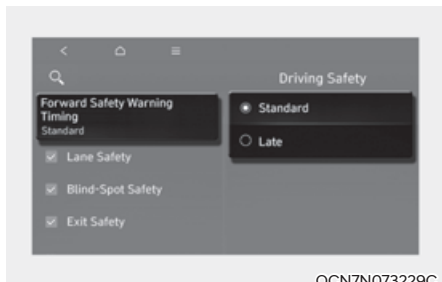
The driver can monitor Forward Collision-Avoidance Assist ON/OFF status from the Settings menu. If the  warning light remains ON when Forward Collision-Avoidance Assist is ON, have the vehicle inspected by an authorized HYUNDAI dealer.



### WARNING

When the engine is restarted, Forward Collision-Avoidance Assist will always turn on. However, if Forward Safety is deselected, the driver should always be aware of the surroundings and drive safely.

### Forward Safety warning timing



OCN7N073229C

With the engine on, select **Settings > Vehicle > Driver Assistance > Driving Safety > Forward Safety Warning Timing** settings menu in the infotainment system to change the initial warning activation time for Forward Collision-Avoidance Assist. The warning time can be set to either **Standard** or **Late**.

- Use **Standard** in normal driving conditions. If the Warning Timing seems sensitive, change it to **Late**.
- If **Late** is selected, Forward Collision-Avoidance Assist warns the driver more slowly.



### CAUTION

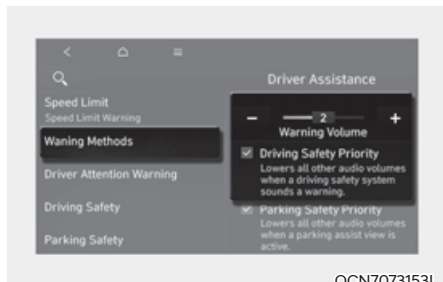
- Even though 'Standard' is selected for Warning Timing, if the front vehicle suddenly stops, the warning may seem late.
- Select 'Late' for Warning Timing when traffic is light and when driving speed is slow.



### Information

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

### Warning methods



OCN7073153L

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

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

### Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.

### Forward Collision-Avoidance Assist Operation

#### Warning and control


The basic function for Forward Collision-Avoidance Assist is to warn and help control the vehicle depending on the collision risk level:

- Collision Warning
- Emergency Braking
- Stopping vehicle and ending brake control

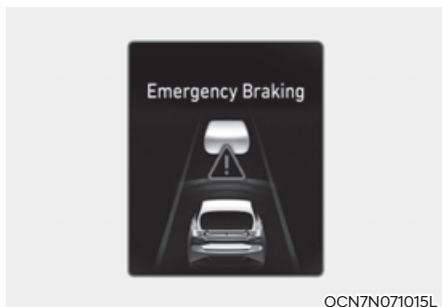


OCN7N071014L

#### Collision Warning


To warn the driver of a collision, Forward Safety warning light  blinking, the 'Collision Warning' warning message will appear on the instrument cluster, an audible warning will sound.

- If a vehicle or powered two-wheeler is detected in front, the function will operate when your vehicle speed is between about 10~180 km/h (6~112 mph).
- If a pedestrian or cyclist is detected in front, the function will operate when your vehicle speed is between about 10~80 km/h (6~50 mph).



OCN7N071015L

### Emergency Braking

To warn the driver that emergency braking will be assisted, Forward Safety warning light  blinking, the 'Emergency Braking' warning message will appear on the instrument cluster, an audible warning will sound.

In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the vehicle, powered two-wheeler, pedestrian or cyclist ahead.

- If a vehicle or powered two-wheeler is detected in front, the function will operate when your vehicle speed is about 10~60 km/h (6~37 mph).
- If a pedestrian or cyclist is detected in front, the function will operate when your vehicle speed is about 10~60 km/h (6~37 mph).



### CAUTION

**The function operation range may decrease due to the front traffic condition or the surroundings of the vehicle.**



OCN7N071017L

### Stopping vehicle and ending brake control

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



## WARNING

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

- For your safety, only change the Settings after parking the vehicle at a safe location.
- 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.
- Forward Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn the driver late or may not warn the driver.
- Never deliberately operate Forward Collision-Avoidance Assist on people, objects, etc. It may cause serious injury or death.
- Forward Collision-Avoidance Assist may not operate if the driver depresses the brake pedal to avoid collision.
- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- If any other function'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.
- Even if there is a problem with Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.
- During emergency braking, braking control by Forward Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.



## CAUTION

- Depending on the condition of the vehicle, powered two-wheeler, pedestrian 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.
- Forward Collision-Avoidance Assist may be limited or disabled if the vehicle speed is too high or the distance to the vehicle ahead is far.

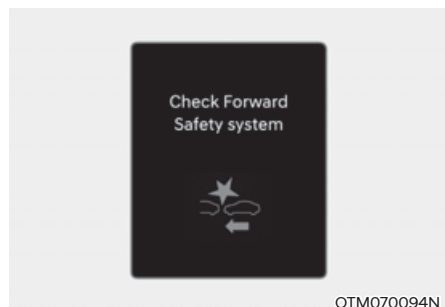




## Information

- In a situation 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.

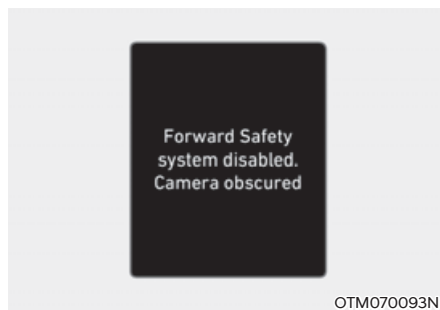
## Forward Collision-Avoidance Assist Malfunction and Limitations

### **Forward Collision-Avoidance Assist malfunction**





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

### **Forward Collision-Avoidance Assist disabled**



When the front windshield where the front view camera is located, 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' warning message, and the  and  warning lights will illuminate on the instrument cluster.

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

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



## WARNING

- **Even though the warning message or warning light does not appear on the instrument cluster, Forward Collision-Avoidance Assist may not properly operate.**
- **Forward Collision-Avoidance Assist may not properly operate in an area (for example, open terrain), where any objects are not detected after turning ON the engine.**
- **If the vehicle is turned off and restarted while the camera is blocked or malfunctioned, the condition is maintained. Therefore, Forward Collision-Avoidance Assist may not operate properly.**

### ***Limitations of the Forward Collision-Avoidance Assist***

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

- The detecting sensor or the surroundings are contaminated or damaged
- The temperature around the front view camera is high or low
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or stuck of 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 headlights are not on or are not bright
- Only part of the vehicle, powered two-wheeler, pedestrian or cyclist is detected
- The vehicle in front is a bus, heavy truck, truck with an unusually shaped cargo, trailer, etc.
- The vehicle or powered two-wheeler in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps of the front vehicle are turned off or are not bright.
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visible, etc.
- The front vehicle's ground clearance is low or high
- A vehicle, powered two-wheeler, pedestrian or cyclist suddenly cuts in front
- The vehicle or powered two-wheeler in front is detected late
- The vehicle or powered two-wheeler in front is suddenly blocked by an obstacle
- The vehicle or powered two-wheeler in front suddenly changes lane or suddenly reduces speed
- The vehicle or powered two-wheeler in front is bent out of shape
- The vehicle in front is covered with snow



- You are departing or returning to the lane
- Unstable driving
- You are on a roundabout and the vehicle in front is not detected
- You are continuously driving in a circle
- The vehicle or powered two-wheeler in front has an unusual shape
- The vehicle or powered two-wheeler in front is driving uphill or downhill
- The pedestrian or cyclist in front is not fully detected, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian or cyclist in front is wearing clothing or equipment that makes it difficult to detect



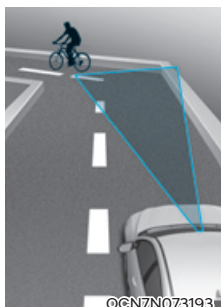
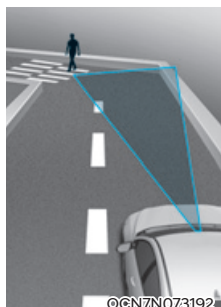
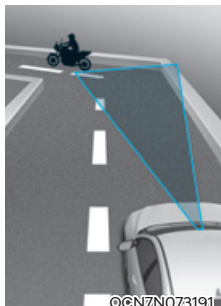
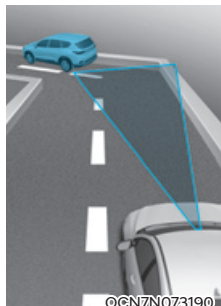
The illustration above shows the image the front view camera will detect as a vehicle, a powered two-wheeler, a pedestrian or a cyclist.

- 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 is moving intersected with the driving direction
  - There is a group of pedestrians, cyclists or a large crowd in front
  - The pedestrian or cyclist in front is wearing clothing that easily blends into the background, making it difficult to detect
- You are driving by a pedestrian, cyclist, traffic sign, structure, etc. near the intersection
  - When driving in the following places
    - Driving through steam, smoke or shadow
    - Driving through a tunnel or iron bridge
    - Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
    - Driving in a parking lot
    - Driving through a tollgate, construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
    - Driving near areas containing metal substances, such as a construction zone, railroad, etc.
    - Driving on an incline road, curved road, etc.
    - Driving through a roadside with trees or streetlights
    - 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
  - When the vehicle moves unstable or shakes violently
  - When the height of the vehicle changes significantly due to abnormal tire pressure or overloading of the cargo compartment



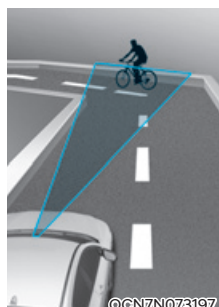
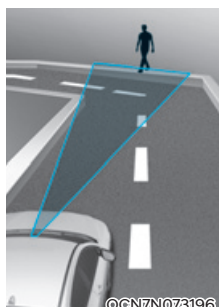
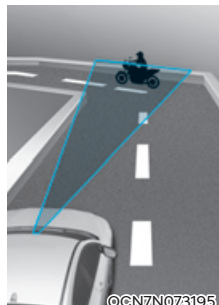
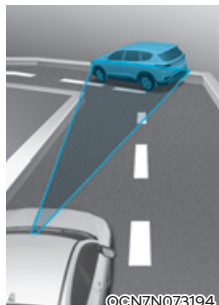
## WARNING

- Driving on a curved road



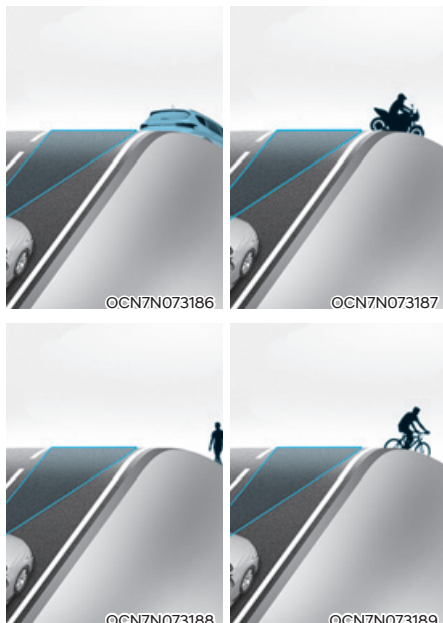
Forward Collision-Avoidance Assist may not detect other vehicles, powered two-wheelers, pedestrians or cyclists in front of you on curved roads that adversely affect the performance of the sensors. This may result in no warning or braking assist when necessary.

When driving on a curve, 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.



Forward Collision-Avoidance Assist may detect a vehicle, a powered two-wheeler, a pedestrian or a 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. Always check the traffic conditions around the vehicle.

- Driving on an inclined road



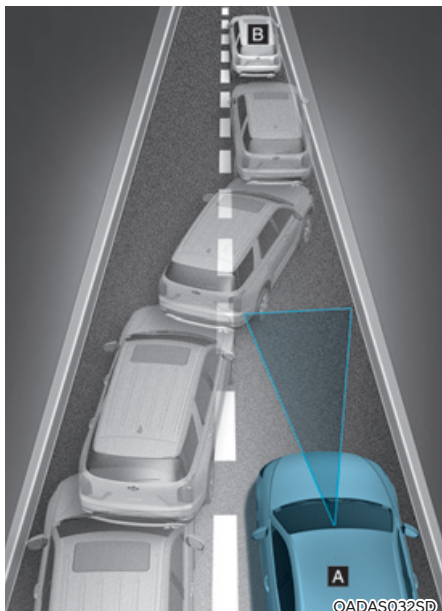
**Forward Collision-Avoidance Assist may not detect a vehicle, a powered two-wheeler, a pedestrian or a cyclist in front of you while driving uphill or downhill adversely affecting the performance of the sensors.**

**This may result in unnecessary warning or braking assist, or no warning or braking assist when necessary.**

**Also, vehicle speed may rapidly decrease when a vehicle, a powered two-wheeler, a pedestrian or a 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.**

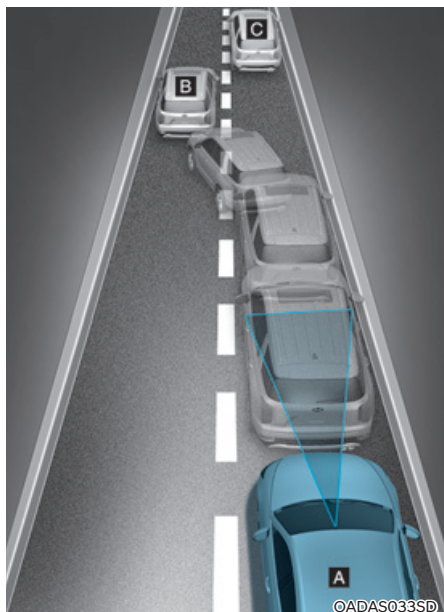
- Changing lanes



[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.**

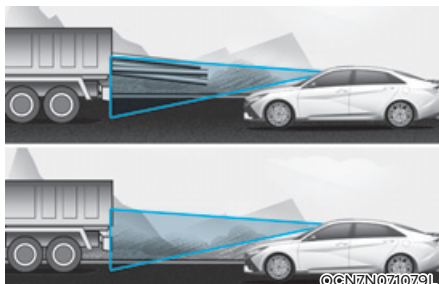


[A] : Your vehicle,  
[B] : Lane changing vehicle,  
[C] : Same lane vehicle

**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, turn off Forward Collision-Avoidance Assist for safety reasons.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles, powered two-wheelers, pedestrians or 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 properly if interfered by strong electromagnetic waves.
- Forward Collision-Avoidance Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

## LANE KEEPING ASSIST (LKA)

While driving over a certain speed, Lane Keeping Assist detects lane markings (or road edges) and may warn you if your vehicle leaves the lane without using the turn signal and may assist with steering to prevent your vehicle departing from its travel 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 illustration above for the detailed location of the detecting sensor.

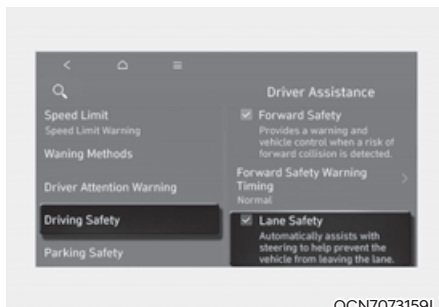


### CAUTION

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


## Lane Keeping Assist Settings

### Lane Safety



OCN7073159L

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

If **Lane safety** 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 **Lane safety** is deselected, Lane Keeping Assist turns off and the  indicator light turns off on the instrument cluster.



### WARNING

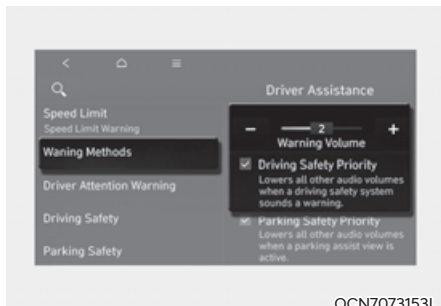
- Lane Keeping Assist does not control the steering wheel when the vehicle is driven in the middle of the lane.
- The driver should always be aware of the surroundings. If "Lane Safety" is deselected, Lane Keeping Assist cannot assist you.



### Information

When Lane Keeping Assist is turned off with the Lane Driving Assist button, Lane Safety settings will turn off.

## Warning Methods



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

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.



### **i** Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.



## Lane Keeping Assist Operation

### Turning Lane Keeping Assist ON/OFF



With the vehicle on, press and hold the Lane Driving Assist  button located on the steering wheel to turn on and off. When Lane Keeping Assist is on, the grey  indicator is on.


### **i** Information

- When Lane Keeping Assist is ready to operate, the grey  indicator is on.
- When Lane Keeping Assist is enabled, the green  indicator is on.


### **Warning and control**

Lane Keeping Assist will warn and help control the vehicle with 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 instrument cluster, the lane line will blink on the instrument cluster depending on which direction the vehicle is veering, and an audible warning will sound.
- Lane Departure Warning will operate when your vehicle speed is about 60~200 km/h (40~120 mph).

#### **Lane Keeping Assist**

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



OCN7N071095L

#### **Hands-off warning**

If the driver takes their hands off the steering wheel for several seconds, the 'Keep hands on the steering wheel' warning message will appear on the instrument 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.**



## **i** Information

- The status of the Lane Keeping Assist operation appears in Driving Assist mode on the instrument cluster. Refer to the "View modes" section in chapter 4.
- When lane markings (or road edges) are detected, the lane lines on the instrument cluster will change from grey to white and the green  indicator light will illuminate.

■ Lane undetected



OCN7N071023

■ Lane detected



OCN7N071022


- 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.

## Lane Keeping Assist Malfunction and Limitations

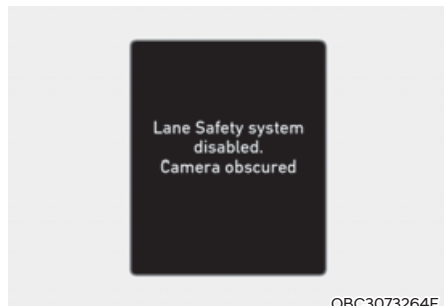
### *Lane Keeping Assist malfunction*



B0317EU02

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 instrument cluster. If this occurs, have the vehicle inspected by an authorized HYUNDAI dealer.

### Lane Keeping Assist disabled



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

If this occurs, the 'Lane Safety system disabled. Camera obscured' warning message and master (⚠) light or Lane Keeping Assist warning light (🚦) will appear on the instrument cluster.

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

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



### WARNING

- **Even though the warning message or warning light does not appear on the instrument cluster, Lane Keeping Assist may not properly operate.**
- **If the vehicle is turned off and restarted while the camera is blocked or malfunctioned, the condition is maintained. Therefore, Lane Keeping Assist may not operate properly.**

### Limitations of Lane Keeping Assist

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

- The lane is contaminated or difficult to detect because:
  - The lane markings (or road edge) 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.
- There are more than two lane markings (or road edges) on the road
- The number of lanes change or the lanes merge
- 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 information on the limitations of the front view camera, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.

## WARNING

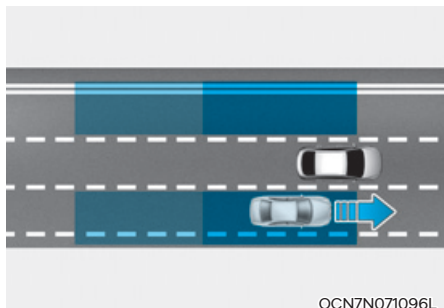
Take the following precautions when using Lane Keeping Assist:

- The driver has 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 function'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 sudden lane changes
  - The vehicle brakes suddenly

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

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

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

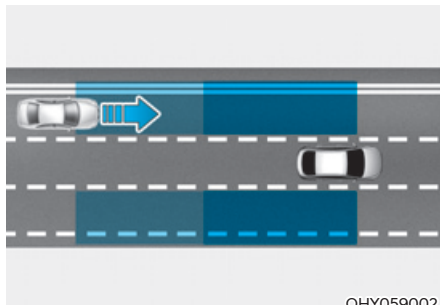


Blind-Spot Collision-Avoidance Assist helps detect and inform the driver that a vehicle is in the blind spot.



### CAUTION

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

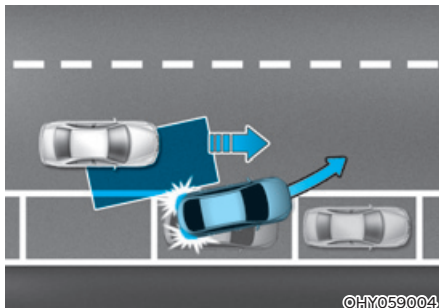


Blind-Spot Collision-Avoidance Assist helps detect and inform the driver that a vehicle is approaching at high speed from the blind spot area.



### CAUTION

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



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, Blind-Spot Collision-Avoidance Assist will help avoid collision by applying the brake.

### Detecting sensor



[1] : Rear corner radar

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



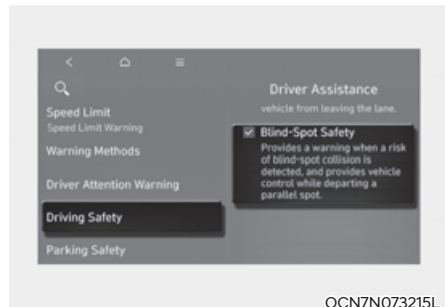
### CAUTION

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

- 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.
- 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.
- Never disassemble the rear corner radar or radar assembly, or cause any damage to it.
- If the rear corner radar or near the radar has been damaged or impacted in any way, even though the warning message does not appear on the instrument cluster, Blind-Spot Collision-Avoidance Assist may not operate properly. Have the vehicle inspected by an authorized HYUNDAI dealer.
- If the rear corner radars have been replaced or repaired, have the vehicle inspected by an authorized HYUNDAI dealer.
- Blind-Spot Collision-Avoidance Assist may not work properly if the bumper has been replaced, or the surroundings of the rear corner radar have been damaged or paint has been applied.

## Blind-Spot Collision-Avoidance Assist Settings

### Blind-Spot Safety



OCN7N073215L

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

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



OTM070097N

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

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

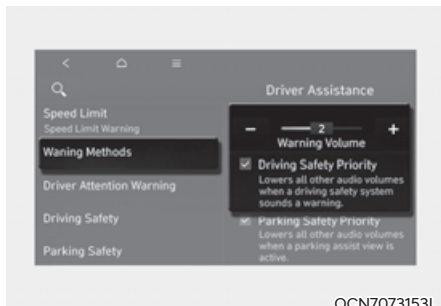
### WARNING

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

### Information

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

## Warning Methods



OCN7073153L

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

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

## Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.

## Blind-Spot Collision-Avoidance Assist Operation

Blind-Spot Collision-Avoidance Assist warns and control you by the following actions:

- Collision warning
- Collision-Avoidance Assist

### Collision-Warning



OCN7073232

To warn the driver a vehicle is detected, the warning light on the side view mirror will illuminate.

- Vehicle detection warning 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 (6 mph).

Collision warning will operate when the turn signal is turned on in the direction of the detected vehicle.

- To warn the driver of a collision, the warning light on the side view mirror will illuminate, an audible warning may sound and the steering wheel will vibrate.
- When the turn signal is turned off, the collision warning will be canceled and Blind-Spot Collision-Avoidance Assist will return to vehicle detection state.

Collision warning may warn you under the following conditions:

- Your vehicle speed is above 40 km/h (25 mph).
- The speed of the vehicle in your blind spot area is above 10 km/h (6 mph).



### WARNING

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



### Information

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

### ***Collision-avoidance assist (while parallel parking exit)***



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





## WARNING

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

- When the vehicle is stopped due to emergency braking, the 'Drive carefully' warning message will appear on the instrument cluster. For your safety, the driver should depress the brake pedal immediately and check the surroundings.
- Brake control will end after the vehicle is stopped by emergency braking for about 2 seconds.
- For your safety, only change the Settings after parking the vehicle at a safe location.
- If any other system's warning message is displayed or audible warning is generated, 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 function will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.
- During Blind-Spot Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Blind-Spot Collision-Avoidance Assist, the vehicle's basic braking performance will operate properly.

OCN7N071017L

- 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

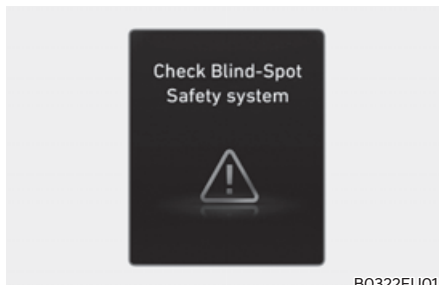
The brake control may not operate properly depending on the status of ESC (Electronic Stability Control).


There will only be a warning when:

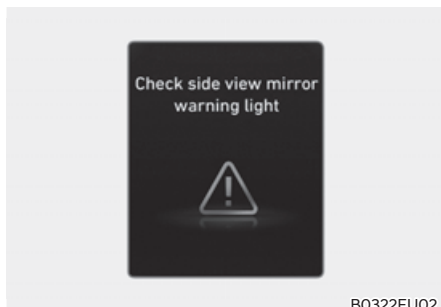
- The ESC (Electronic Stability Control) warning light is on
- ESC (Electronic Stability Control) is engaged in a different function

## Blind-Spot Collision-Avoidance Assist Malfunction and Limitations

### *Blind-Spot Collision-Avoidance Assist malfunction*



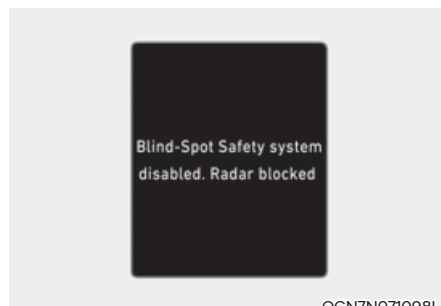
When Blind-Spot Collision-Avoidance Assist is not working properly, the 'Check Blind-Spot Safety system' warning message will appear on the instrument cluster for several seconds, and the master () warning light will illuminate on the instrument cluster. If this occurs, have the vehicle inspected by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



B0322EU02

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

### ***Blind-Spot Collision-Avoidance Assist disabled***



OCN7N071098L

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 instrument cluster.

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

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



## WARNING

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



## CAUTION

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

### ***Limitations of the Blind-Spot Collision-Avoidance Assist***

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

- There is inclement weather, such as heavy snow, heavy rain, etc.
- The rear corner radar is covered with snow, rain, dirt, etc.
- The temperature around the rear corner radar is high or low
- Driving on a highway (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 through a narrow road where trees or grass are overgrown
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving on a wet road surface, such as a puddle on the road
- The other vehicle drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity

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

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

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

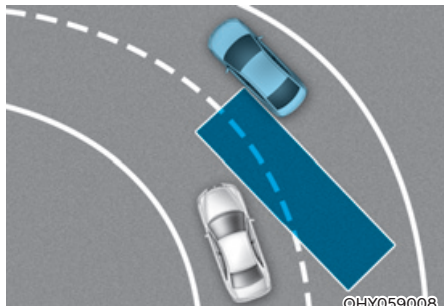
Braking control may not work, driver's attention is required in the following circumstances:

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



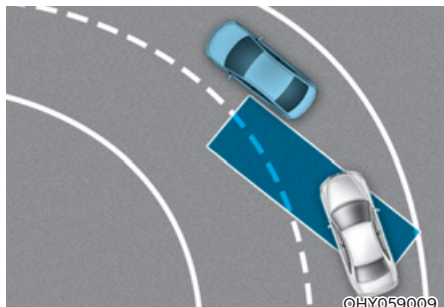
## WARNING

- Driving on a curved road



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

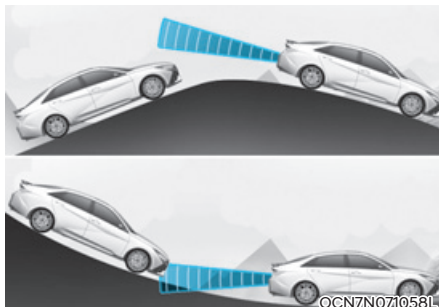
Always pay attention to road and driving conditions while driving.



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

Always pay attention to road and driving conditions while driving.

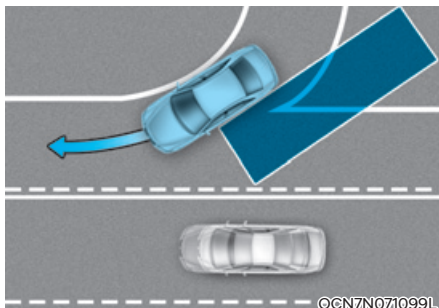
- Driving on an inclined road



Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a slope. Blind-Spot Collision-Avoidance Assist may not detect the vehicle in the next lane or may incorrectly detect the ground or structure.

Always pay attention to road and driving conditions while driving.

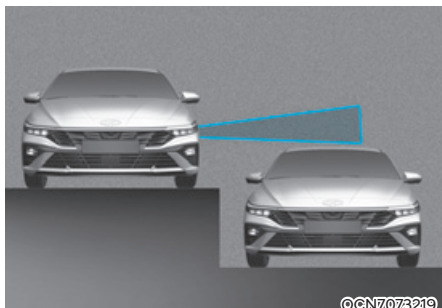
- Driving where the road is merging/dividing



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

Always pay attention to road and driving conditions while driving.

- Driving where the heights of the lanes are different



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

Always pay attention to road and driving conditions while driving.



## WARNING

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



## Information

This device complies with Industry Canada RSS-210 standard.

Operation is subject to the following three conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.



## Information

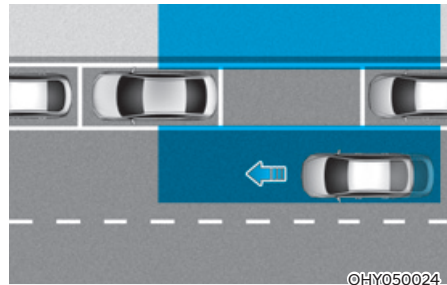
Radio frequency radiation exposure information:

This equipment complies with RSS-210 radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance of 20 cm (8 in.) between the radiator (antenna) and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## SAFE EXIT WARNING (SEW) (IF EQUIPPED)



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

### CAUTION

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

### Detecting sensor



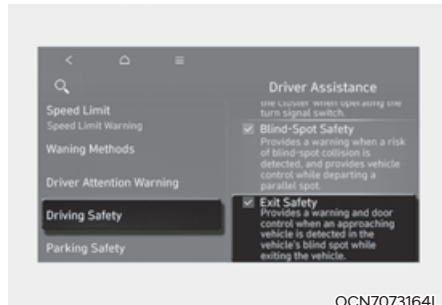
[1] : Rear corner radar

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

### NOTICE

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 Exit Safety



With the engine on, select **Setup > Vehicle > Driver Assistance > Driving Safety > Exit Safety** from the Settings menu in the infotainment system to turn on Safe Exit Warning and deselect to turn off the function.

### WARNING

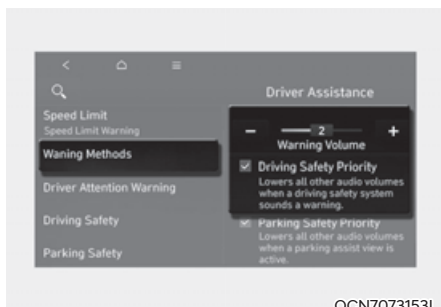
The driver should always be aware that unexpected and sudden situations may occur. If Exit Safety is deselected, Safe Exit Warning cannot assist you.

### Information

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



## Warning Methods



OCN7073153L

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

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

## Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.

## Safe Exit Warning Operation

### Safe Exit Warning



OCN707323L



OCN7073166L

### Collision warning when exiting vehicle

- When an approaching vehicle from the rear is detected at the moment a door is opened, the warning light on the side view mirror will blink and the 'Collision Warning' warning message will appear on the instrument 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 function's warning message is displayed or audible warning is generated, Safe Exit Warning 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 and 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 occur 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.

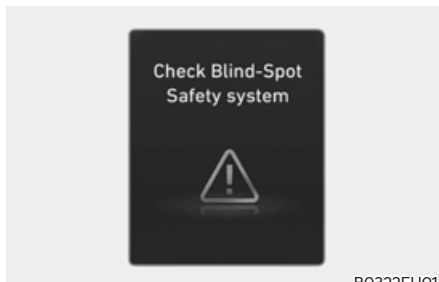


## Information

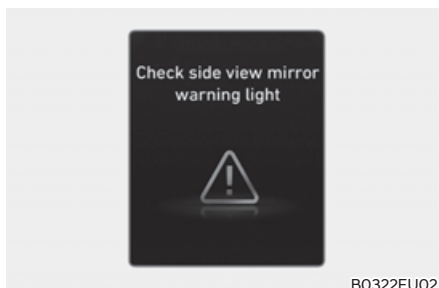
- After the engine is turned off, Safe Exit Warning operates about for 3 minutes, but turns off immediately if the doors are locked.
- The images and colors in the instrument cluster may differ depending on the instrument cluster type or theme selected from the settings menu.

## Safe Exit Warning Malfunction and Limitations

### Safe Exit Warning malfunction

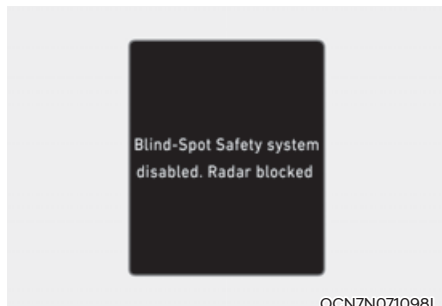


When Safe Exit Warning is not working properly, the 'Check Blind-Spot Safety system' warning message will appear on the instrument cluster for several seconds, and the master (⚠) warning light will appear on the instrument cluster. If this occurs, have the vehicle inspected by an authorized HYUNDAI dealer.



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

### Safe Exit Warning 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 instrument cluster.

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

If Safe Exit Warning does not operate properly after it is removed, have the vehicle 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 objects are not detected right after the engine is turned on, or when the detecting sensor is blocked with foreign material right after the engine is turned on.



### CAUTION

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

### Limitations of Safe Exit Warning

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

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



### Information

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



### WARNING

- Safe Exit Warning may not operate properly if interfered by strong electromagnetic waves.
- Safe Exit Warning may not operate for 3 seconds after the vehicle is started, or rear corner radars are initialized.
- If the vehicle is turned off and restarted while the rear corner radar is blocked or malfunctioned, the condition is maintained. Therefore, Safe Exit Warning may not operate properly.

### **Information**

**This device complies with Industry Canada RSS-210 standard.**

**Operation is subject to the following three conditions:**

- 1. This device may not cause harmful interference, and**
- 2. This device must accept any interference received, including interference that may cause undesired operation.**
- 3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.**

### **Information**

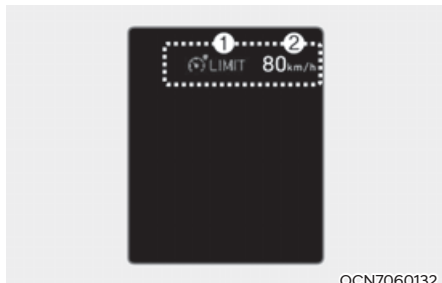
**Radio frequency radiation exposure information:**

**This equipment complies with RSS-210 radiation exposure limits set forth for an uncontrolled environment.**

**This equipment should be installed and operated with minimum distance of 20 cm (8 in.) between the radiator (antenna) and your body.**

**This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.**

## MANUAL SPEED LIMIT ASSIST (MSLA)



OCN7060132

[1] : Manual Speed Limit Assist enabled indicator

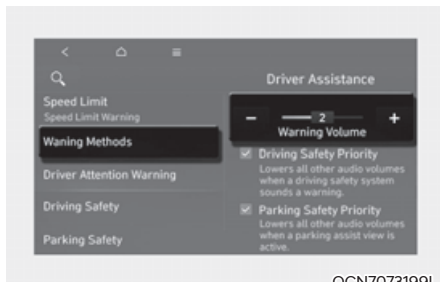
[2] : Set speed

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 operates (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

## Manual Speed Limit Assist Settings

### Warning Methods



OCN7073199L

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

- **Warning Volume:** Adjusts the volume of the warning sound.

### **i** Information

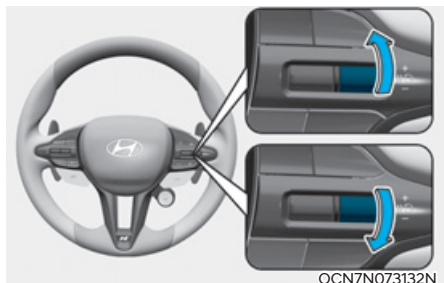
- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.

## Manual Speed Limit Assist Operation

### Setting speed limit



1. Press and hold Driving Assist (DA) button at the desired speed. The Manual Speed Limit Assist (MSLA) indicator will illuminate on the instrument cluster.



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

The speed will increase or decrease to the nearest multiple of ten (multiple of five in mph) at first, and then increase or decrease by 10 km/h (5 mph).



[1] : Set speed

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

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

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

### Temporarily pausing Manual Speed Limit Assist



OCN7N073133N

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

### Resuming Manual Speed Limit Assist



OCN7N073136CN

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

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

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

### Turning off Manual Speed Limit Assist



OCN7N073006N

Press the Driving Assist (**DA**) button to turn Manual Speed Limit Assist off. The Manual Speed Limit Assist (**M** LIMIT) indicator will go off.

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

## INTELLIGENT SPEED LIMIT ASSIST (ISLA)

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



### CAUTION

- Intelligent Speed Limit Assist may not operate properly if the function is used in other countries.
- If a navigation is applied to your vehicle, the navigation needs to be regularly updated for Intelligent Speed Limit Assist to operate properly.
- The infotainment system may change after software updates. For more information, refer to the manual provided in the infotainment system and the quick reference guide.

### Detecting sensor



[1]: Front view camera

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



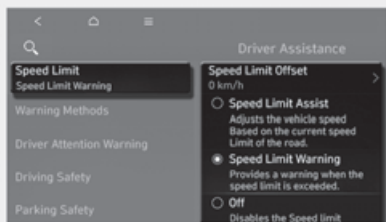
### CAUTION

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



## Intelligent Speed Limit Assist Settings

### Speed Limit



OCN7073168C

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

- **Speed Limit Offset:** 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.
- **Speed Limit Assist:** Intelligent Speed Limit Assist will inform the driver of speed limit and additional road signs. In addition, Intelligent Speed Limit Assist will inform the driver to change set speed of Manual Speed Limit Assist to help the driver stay within the speed limit.
- **Speed Limit Warning:** Intelligent Speed Limit Assist will inform the driver of speed limit. In addition, Intelligent Speed Limit Assist will warn the driver when the vehicle is driven faster than the speed limit.
- **Off:** Intelligent Speed Limit Assist will turn off.



### WARNING

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

## Intelligent Speed Limit Assist Operation

### Warning and control

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

### **i** Information

Intelligent Speed Limit operation is described based on the offset adjusted to "0". For more information on setting the offset, refer to "Intelligent Speed Limit Assist settings" in this section.

### Displaying speed limit



OCN7N073222C

Speed limit information is displayed on the instrument cluster.

### **i** Information

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

### Warning overspeed



OCN7N073227C

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

### Changing set speed



OCN7N073223C

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

### Set Speed Auto Change (Navigation equipped)



Manual Speed Limit Assist assists the vehicle to adjust its speed according to the speed limit. When the cruising speed is set as same as the speed limit, the vehicle automatically adjusts its speed if the speed limit changes. The function operates on the road which has a speed limit of 70 km/h (44 mph) or higher. When the function is active, the set speed on the instrument cluster appears in green.



### WARNING

- If you want to drive below the speed limit, set the Speed Limit Offset under "0" or use the - switch on the steering wheel to lower the set speed. If the Speed Limit Offset is set over "0", the set speed changes to a speed higher than the limit for the road.
- 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, press the brake pedal to reduce your driving speed.
- If the speed limit of the road is under 30 km/h (20 mph), the set speed change function will not work.
- Intelligent Speed Limit Assist operates using the speed units in the instrument cluster set by the driver. If the speed unit is not set to the speed unit used in your country, Intelligent Speed Limit Assist may not operate properly.

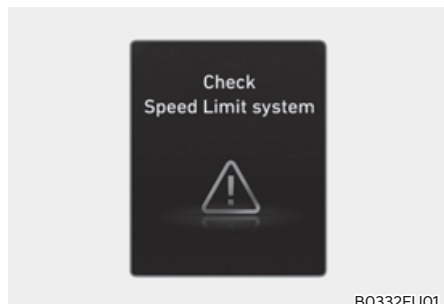


### Information

- For more details on Manual Speed Limit Assist operation, refer to "Manual Speed Limit Assist (MSLA)" section in this chapter.

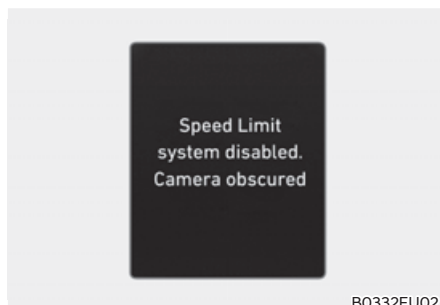
## Intelligent Speed Limit Assist Malfunction and Limitations

### Intelligent Speed Limit Assist malfunction



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

### Intelligent Speed Limit Assist disabled



If the area 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 and (⏏) warning light will appear on the instrument cluster.

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

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



### WARNING

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

## **Limitations of Intelligent Speed Limit Assist**

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

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



### **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 area.**
- **Intelligent Speed Limit Assist may not operate for 15 seconds after the vehicle is started, or the front camera is initialised.**



### **Information**

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

## DRIVER ATTENTION WARNING (DAW)

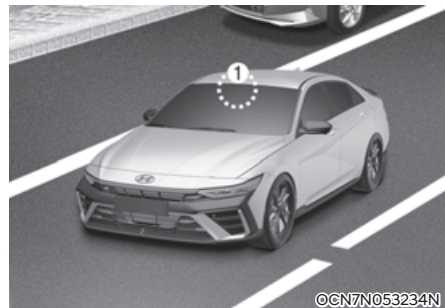
### Inattentive Driving Warning function

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

### Leading vehicle departure alert function

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

### Detecting sensor



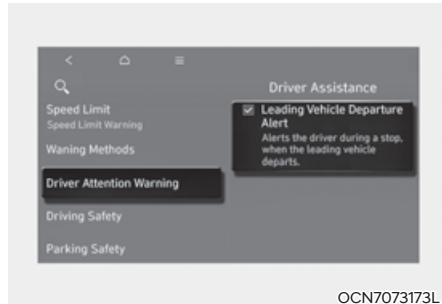
[1] : Front view camera

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 illustration above for the detailed location of the detecting sensor.

### Driver Attention Warning Settings

#### Leading Vehicle Departure Alert



With the engine on, select **Settings > Vehicle > Driver Assistance > Driver Attention Warning** from the settings menu in the infotainment system to set whether to use the function.

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

### CAUTION

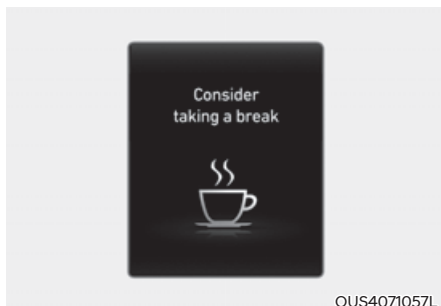
- Always keep the front view camera in good condition to maintain optimal performance of Driver Attention Warning.
- For more information on the precautions of the front view camera, refer to “Forward Collision-Avoidance Assist (FCA)” section in this chapter.

## Driver Attention Warning Operation

### Inattentive Driving Warning function

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

#### Taking a break



- The 'Consider taking a break' message and Driver Attention Warning light (☺) indicator will appear on the instrument 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 4 minutes or 4 minutes has not passed after the last break was suggested.



### WARNING

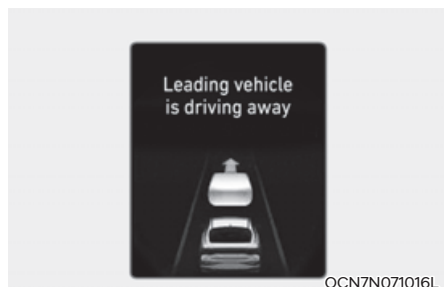
For your safety, only change the Settings after parking the vehicle at a safe location.



### 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.

### Leading Vehicle Departure Alert function



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



#### WARNING

- If any other system's warning message is displayed or audible warning is generated, Leading Vehicle Departure Alert's warning message may not be displayed and audible warning may not be generated.
- The driver 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.

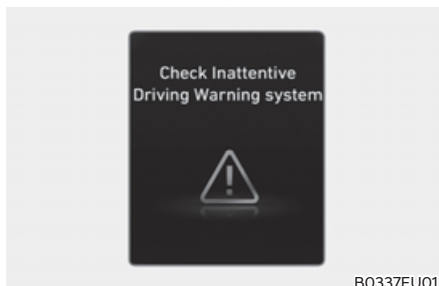


#### Information

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

### Driver Attention Warning Malfunction and Limitations

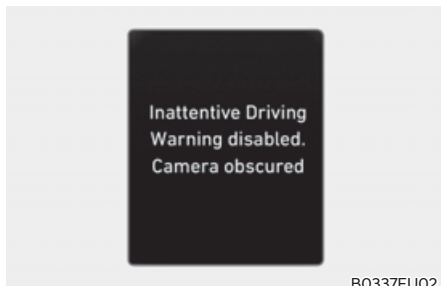
#### Driver Attention Warning malfunction



When Driver Attention Warning is not working properly, the 'Check Inattentive Driving Warning system' warning message will appear on the instrument cluster for several seconds, and the master (⚠) warning light and Driver Attention Warning light (⚠) will illuminate on the instrument cluster. If this occurs, have the vehicle inspected by an authorized HYUNDAI dealer.



### ***Driver Attention Warning disabled***



B0337EU02

When the front windshield where the front view camera is located is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable Driver Attention Warning. If this occurs, the 'Inattentive Driving Warning disabled. Camera obscured' warning message, master (⚠) warning light and Driver Attention Warning light (⚠) will appear on the instrument cluster. Driver Attention Warning will operate properly when snow, rain or foreign material is removed.

If Driver Attention Warning does not operate properly after it is removed, have the vehicle inspected by an authorized HYUNDAI dealer.



### **WARNING**

- Driver Attention Warning may not properly operate in an area (for example, open terrain) where any objects are not detected right after turning ON the vehicle.
- If the vehicle is turned off and restarted while the camera is blocked or malfunctioned, the condition is maintained. Therefore, Driver Attention Warning may not operate properly.

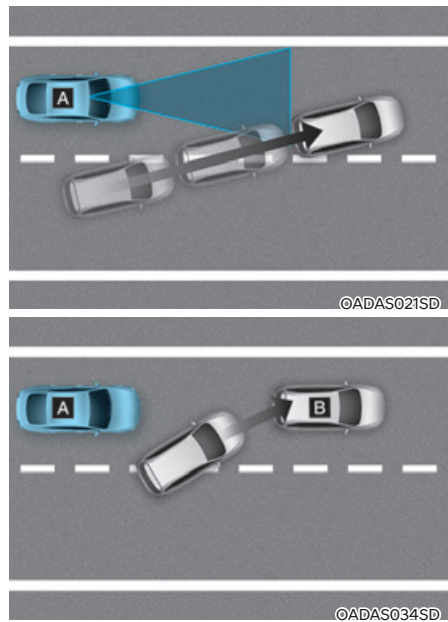
### ***Limitations of Driver Attention Warning***

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**

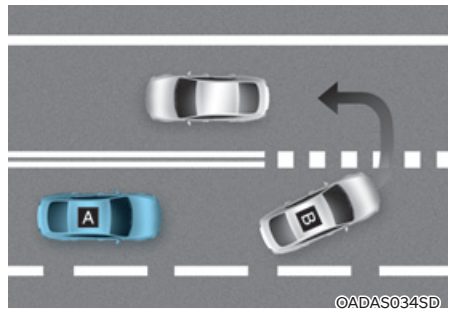
- When the vehicle cuts in



[A] : Your vehicle, [B] : Front vehicle

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

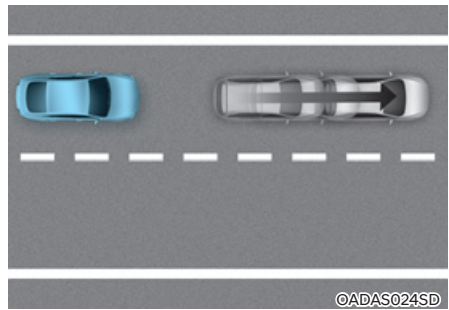
- When the vehicle ahead sharply steers



[A] : Your vehicle, [B] : Front vehicle

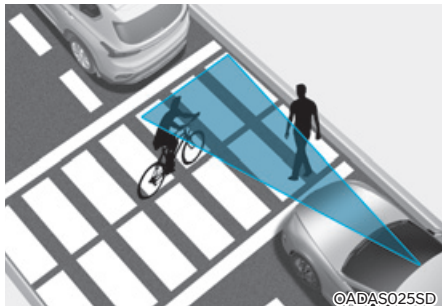
If the vehicle in front makes a sharp turn, such as to turn left or right or make a Uturn, etc., Leading Vehicle Departure Alert may not operate properly.

- When the vehicle ahead abruptly departs



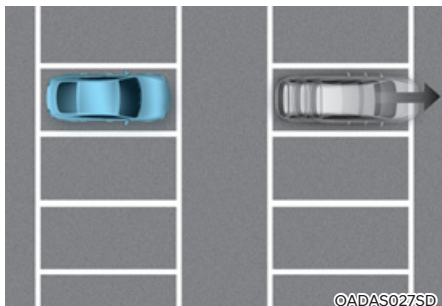
If the vehicle in front abruptly departs, Leading Vehicle Departure Alert may not operate properly.

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



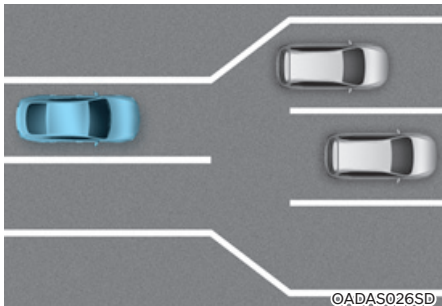
If there is a pedestrian(s) or bicycle(s) in between you and the vehicle in front, Leading Vehicle Departure Alert may not operate properly.

- When in a parking lot



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

- When driving at a 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.



## WARNING

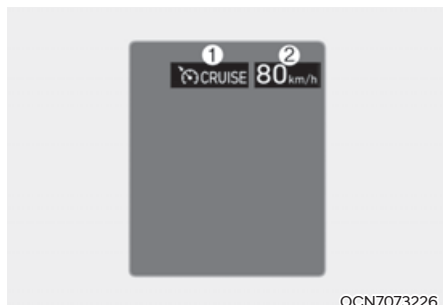
**Driver Attention Warning may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.**



## Information

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

## CRUISE CONTROL (CC)



[1] : Cruise indicator

[2] : Set speed

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

### Cruise Control Operation

#### Setting set speed

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



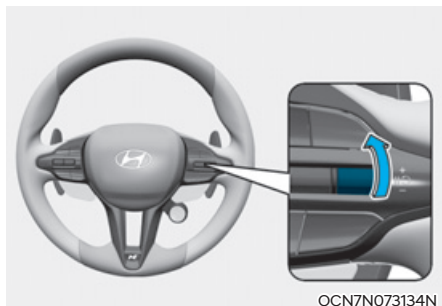
2. Press the Driving Assist (DRIVING ASSIST) button at the desired speed. The set speed and Cruise (CRUISE) indicator will illuminate on the instrument cluster.
3. Release the accelerator pedal.  
Vehicle speed will maintain the set speed even when the accelerator pedal is not depressed.



#### Information

The vehicle may slightly slow down or speed up while driving uphill or downhill.

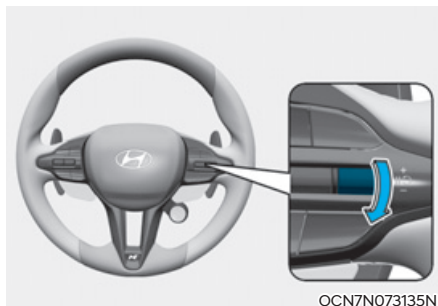
### ***Increasing set speed***



- Push the + switch up and release it immediately. The set speed will increase by 1 km/h (1 mph) each time the switch is operated in this manner.
- Push the + switch up and hold it while monitoring the set speed on the instrument cluster. The set speed will increase to the nearest multiple of ten (multiple of five in mph) 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.

### ***Decreasing set speed***



- Push the - switch down and release it immediately. The set speed will decrease by 1 km/h (1 mph) each time the switch is operated in this manner.
- Push the - switch down and hold it while monitoring the set speed on the instrument cluster. The set speed will decrease to the nearest multiple of ten (multiple of five in mph) at first, and then decrease by 10 km/h (5 mph) each time the switch is operated in this manner.

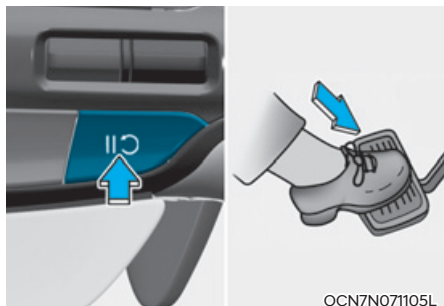
Release the switch at the speed you want to maintain.

### ***Accelerating temporarily***

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 set speed will be set to the current increased speed.

### Temporarily pausing Cruise Control



OCN7N071105L

Cruise Control will be paused when:

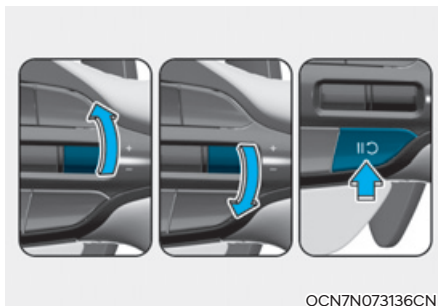
- Depressing the brake pedal.
- Pushing the **||** button.
- Shifting the gear to N (Neutral).
- Decreasing vehicle speed to less than about 30 km/h (20 mph).
- ESC (Electronic Stability Control) is operating.
- Downshifting to 2nd gear when in Manual Shift mode.

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, have the vehicle inspected by an authorized HYUNDAI dealer.**

### Resuming Cruise Control



OCN7N073136CN

Operate the +, - switch or **||** button.

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

If you press the **||** button, vehicle The vehicle will resume to the preset speed.

The vehicle speed must be above 30 km/h (20 mph) for Cruise Control to resume.



#### WARNING

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

## Turning 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

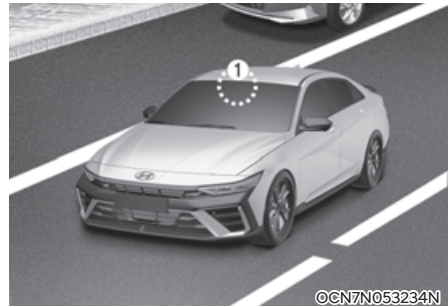
Take the following precautions when using Cruise Control:

- Always set the vehicle speed under the speed limit in your area.
- 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)

## LANE FOLLOWING ASSIST (LFA)

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

### Detecting sensor



[1] : Front view camera

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

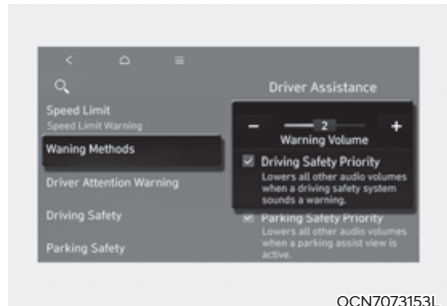
Refer to the illustration above for the detailed location of the detecting sensor.

### CAUTION

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

## Lane Following Assist Settings

### Warning Methods



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

- **Warning Volume:** Adjusts the volume of the warning sound.
- **Driving Safety Priority:** Lowers all other audio volumes when the Driving Safety system sounds a warning.

### Information


- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.



## Lane Following Assist Operation

### Turning Lane Following Assist On/Off




With the engine on, short press the Lane Driving Assist button located on the steering wheel to turn on Lane Following Assist. The white or green  indicator light will illuminate on the instrument cluster.

Press the button again to turn off the function.


## Lane Following Assist



If the vehicle ahead and/or both lane markings are detected and your vehicle speed is below 200 km/h (120 mph), the green  indicator light will illuminate on the instrument cluster, and the function will help center the vehicle in the lane by assisting the steering wheel.



### CAUTION

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

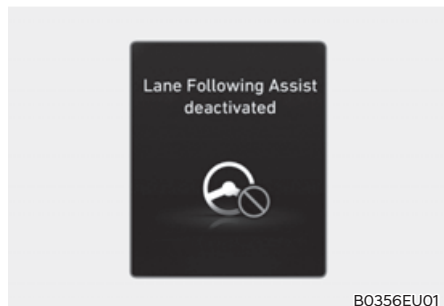
## Hands-off warning



If the driver takes their hands off the steering wheel for several seconds, the '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 deactivated' warning message will appear and Lane Following Assist will be automatically canceled.



## WARNING

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Following Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If the steering wheel is held very lightly the hands-off warning message may appear because the function 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 information 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 instrument cluster will change from grey to white.

■ Lane undetected



OCN7073211

■ Lane detected

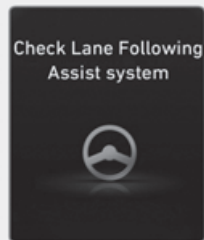


OCN7073210

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

## Lane Following Assist Malfunction and Limitations

### Lane Following Assist malfunction



B0357EU01

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

### Limitations of Lane Following Assist

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

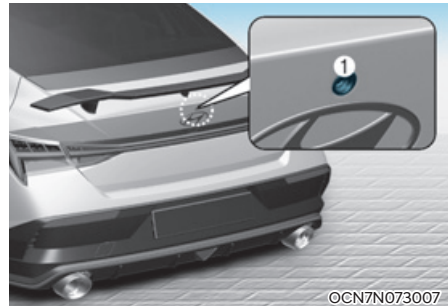
### Information

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

## REAR VIEW MONITOR (RVM)

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

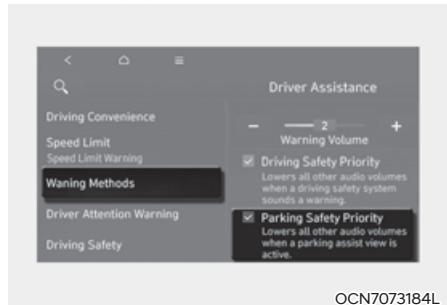
### Detecting sensor



[1] : Wide-rear view camera

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

## Rear View Monitor Settings Warning Methods



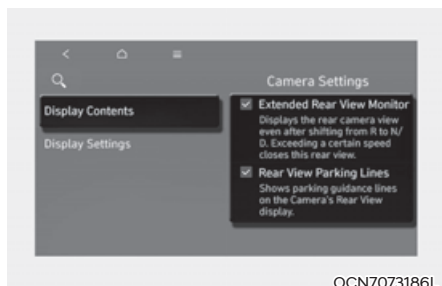
The Warning Methods can be set with the engine on. Select **Setup > Vehicle > Driver Assistance > Warning Methods** from the settings menu in the infotainment system to change the following settings:

- **Parking Safety Priority:** Lowers all other audio volumes when Rear View Monitor is operating.

### Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.

## Camera Settings



You can change Rear View Monitor **Display contents** by touching the setup icon (⚙️) on the screen while Rear View Monitor is operating, or selecting **Setup > Vehicle > Driver Assistance > Parking Safety > Camera Settings** from the Settings menu in the infotainment system when the engine is on.

- **Display Contents:** You can change settings for rear view reference lines.
- **Display settings:** You can change the screen's brightness and contrast.

### Information

There may be no Setting menu depending on the vehicle specification.

## Extended Rear View Monitor

With the vehicle on, select **Camera Settings > Display Contents > Extended Rear View Monitor** from the Settings menu to turn on Extend rear camera use function and deselect to turn off the function.

## Rear View Parking Lines

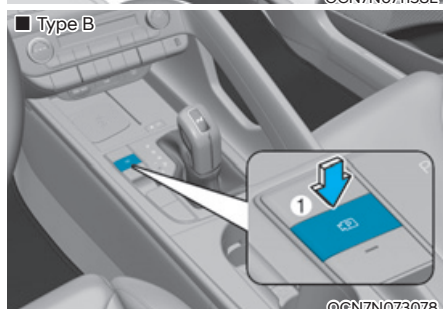
If **Rear View Parking Lines** is selected, the rear view parking guide lines and rear top view guide lines will be displayed at the left side of the infotainment system.

### Information

- 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.
- The horizontal guideline of the Rear Top View Parking Guidance shows the distance 0.5 m (1.6 ft.) and 1.5 m (4.9 ft.) from the vehicle.

## Rear View Monitor Operation

### Parking/View button




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

### Rear View



#### Operating conditions

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

#### Off conditions


- Press the Parking/View button (1) again while the gear is in P (Park), the rear view will turn off.
- Shift the gear from R (Reverse) to P (Park), the rear view will turn off.

### Information

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

### 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.

### Extended Rear View Monitor

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.
- Vehicle speed is 10 km/h or less, the rear view will appear on the screen.

#### Off conditions

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

## Rear View Monitor Malfunction and Limitations

### Rear View Monitor malfunction

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

### Limitations of Rear View Monitor

When the vehicle is stopped for a long time in winter or when the vehicle is parked in an indoor parking lot, the exhaust fumes may temporarily blur the image.

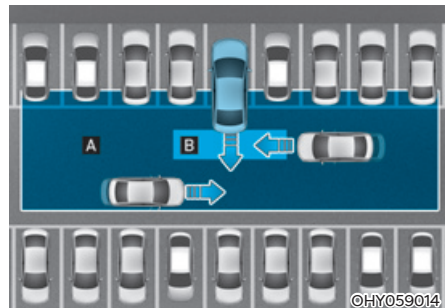


### WARNING

- 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 side view 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 properly. However, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone, etc.). This may damage the camera lens.

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

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



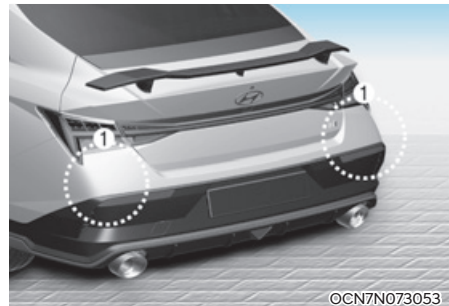
[A] : Rear Cross-Traffic Collision Warning operating range,

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

### CAUTION

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

### *Detecting sensor*



[1] : Rear corner radar

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

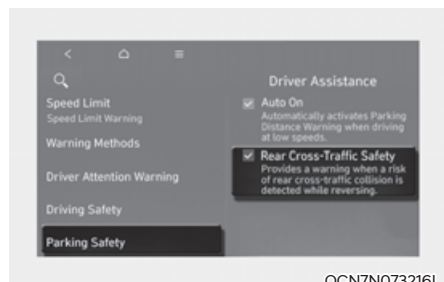
### CAUTION

For more information 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

### Rear Cross-Traffic Safety



OCN7N073216L

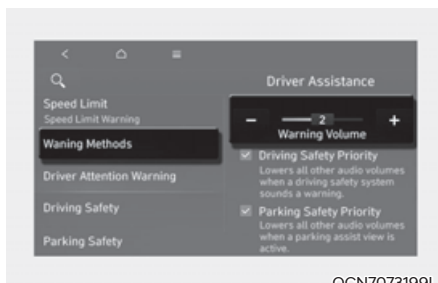
With the engine on, select **Setup > Vehicle > Parking Safety > Rear Cross-Traffic Safety** from the settings menu in the infotainment system to turn on Rear Cross-Traffic Collision-Avoidance Assist and deselect to turn off the function.



### WARNING

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

### Warning Methods



OCN7073199L

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

- **Warning Volume:** Adjusts the volume of the warning sound.



### Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.

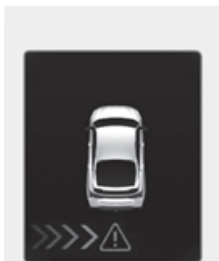
### Rear Cross-Traffic Collision Avoidance Assist Operation

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

#### Collision Warning



OCN7073232



OCN7N071040



OCN7073223N

To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the side view mirror will blink and a warning message will appear on the instrument cluster. At the same time, an audible warning will sound.

A warning will also appear on the infotainment system.

Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:

- The gear is shifted to R (Reverse) and your vehicle speed is below 8 km/h (5 mph).
- The approaching vehicle is detected within about 25 m (82 ft.) from the left or right of your vehicle.
- The speed of the vehicle approaching from the left or right is above 5 km/h (3 mph).

#### Information

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

## Emergency Braking



OCN7073232



OCN7N071108L



OCN7073223N

To warn the driver of an approaching detected vehicle from the rear left/right side of your vehicle, the warning light on the side view mirror will blink and a warning message will appear on the instrument cluster. At the same time, an audible warning will sound.

A warning will also appear on the infotainment system.

Emergency braking will be assisted to help prevent collision with approaching vehicles from the left and right.

Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:

- The gear is shifted to R (Reverse) and your vehicle speed is below 8 km/h (5 mph).
- The approaching vehicle is detected within about 1.5 m (5 ft.) from the left or right of your vehicle.
- The speed of the vehicle approaching from the left or right is above 5 km/h (3 mph).



### WARNING

Brake control will end when:

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

## Stopping vehicle and ending brake control



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

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

- Brake control will end after the vehicle is stopped by emergency braking for about 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, only change the Settings after parking the vehicle at a safe location.
- If any other function's warning message is displayed or audible warning is generated, Rear Cross-Traffic Collision-Avoidance Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Rear Cross-Traffic Collision-Avoidance Assist if the surroundings are noisy.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate if the driver applies the brake pedal to avoid collision.
- During Rear Cross-Traffic Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Rear Cross-Traffic Collision-Avoidance Assist, the vehicle's basic braking will function normally.
- When Rear Cross-Traffic Collision-Avoidance Assist is operating, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal.
- Rear Cross-Traffic Collision-Avoidance Assist does not operate in all situations and cannot avoid all collisions.
- Rear Cross-Traffic Collision-Avoidance Assist may warn the driver late or may not warn the driver depending on the road and driving conditions.

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



### CAUTION

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

There will only be a warning when:

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

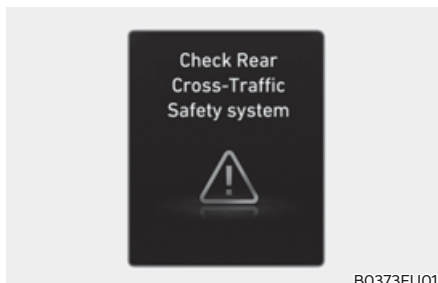



### Information

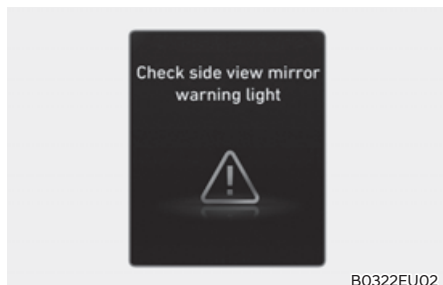
- If braking is assisted by Rear Cross-Traffic Collision-Avoidance Assist, the driver must immediately depress the brake pedal and check vehicle surroundings.
  - Brake control will end when the driver depresses the brake pedal with sufficient power.
  - After shifting the gear to R (Reverse), braking control will operate once for left and right vehicle approach.


## Rear Cross-Traffic Collision Avoidance Assist Malfunction and Limitations

### Rear Cross-Traffic Collision-Avoidance Assist malfunction

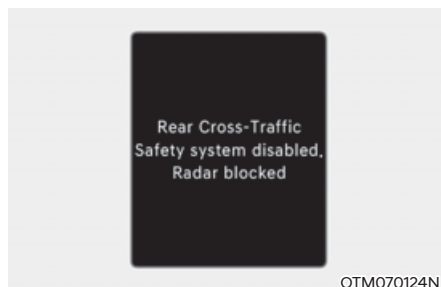


When Rear Cross-Traffic Collision-Avoidance Assist is not working properly, the 'Check Rear Cross-Traffic Safety system' warning message will appear on the instrument cluster for several seconds, and the master  warning light will illuminate on the instrument cluster. If this occurs, have the vehicle inspected by an authorized HYUNDAI dealer.



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

### ***Rear Cross-Traffic Collision-Avoidance Assist disabled***



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

If this occurs, the 'Rear Cross-Traffic Safety system disabled. Radar blocked' warning message will appear on the instrument cluster.

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

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



## WARNING

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



## CAUTION

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

## ***Limitations of the Rear Cross-Traffic Collision-Avoidance Assist***

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

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

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

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



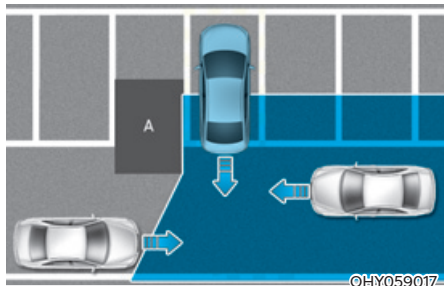
## Information

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



## WARNING

- Driving near a vehicle or structure

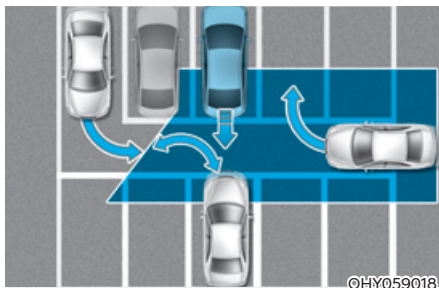


[A] : Structure

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

Always check your surroundings while backing up.

- When the vehicle is in a complex parking environment

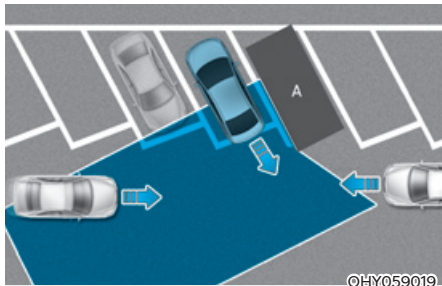


**Rear Cross-Traffic Collision-Avoidance Assist** may detect vehicles which are parking or pulling out near your vehicle (for example, a vehicle leaving beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.). If this occurs, the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

Always check your surroundings while backing up.



- When the vehicle is parked diagonally

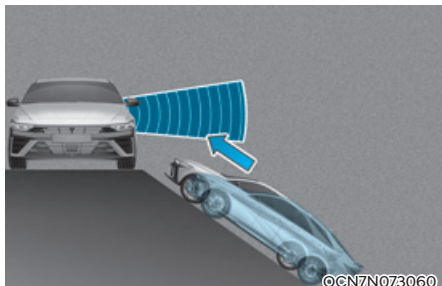


[A] : Vehicle

**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.

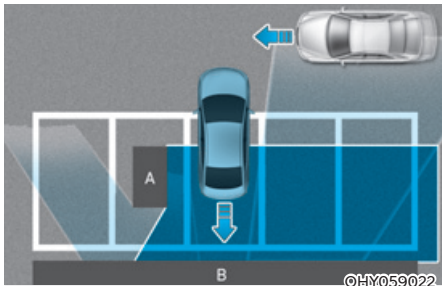
- When the vehicle is on or near a slope



**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

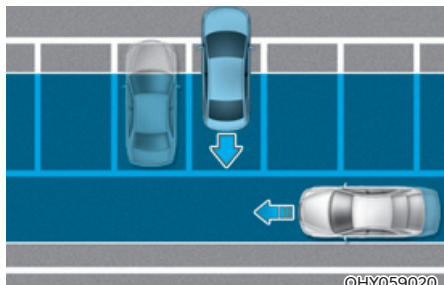


[A] : Structure, [B] : Wall

**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 properly if interfered by strong electromagnetic waves.
- Rear Cross-Traffic Collision-Avoidance Assist may not operate for 3 seconds after the vehicle is started, or the rear corner radars are initialized.



## Information

This device complies with Industry Canada RSS-210 standard.

Operation is subject to the following three conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.
3. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.



## Information

Radio frequency radiation exposure information:

This equipment complies with RSS-210 radiation exposure limits set forth for an uncontrolled environment.

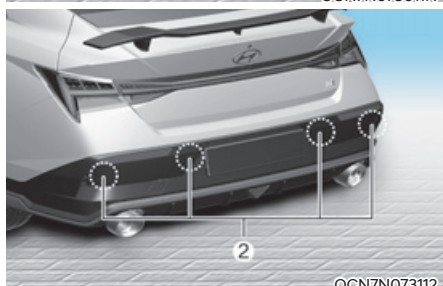
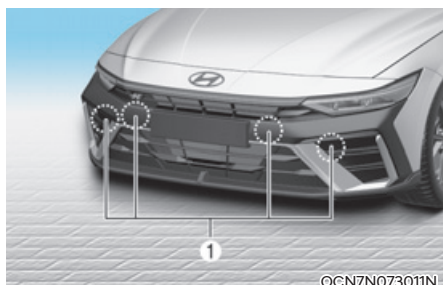
This equipment should be installed and operated with minimum distance of 20 cm (8 in.) between the radiator (antenna) and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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

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

### Detecting sensor



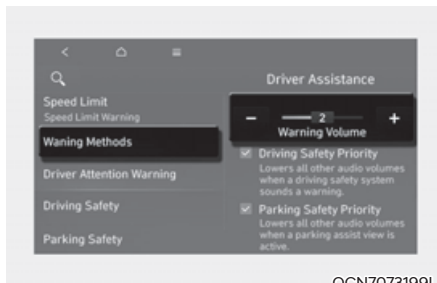
[1] : Front ultrasonic sensors

[2] : Rear ultrasonic sensors

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

## Forward/Reverse Parking Distance Warning Settings

### Warning Methods



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

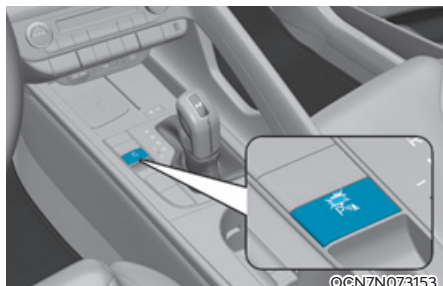
- **Warning Volume:** Adjusts the volume of the warning sound.

### Information

- If you change the Warning Methods, it can be applied to each function of the driver assistance system. Please check and change it in each function.
- If the vehicle is restarted, Warning Methods will maintain the last setting.
- The setting menu may not exist based on vehicle specification.

## Forward/Reverse Parking Distance Warning Operation

### Parking Safety button



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


- When 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.




### 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 (1) button indicator light is on
  - **Parking Distance Warning Auto On** is selected from the Settings menu and the gear is in D (Drive)
  - The gear is shifted to R (Reverse) (only front corner warning is on)



### Information

- **Forward Parking Distance Warning will operate only when the vehicle's forward speed is below 10 km/h (6 mph).**
- **While the gear is in R (Reverse), Forward Parking Distance Warning operates only for the front outer side area.**
- **When Parking Distance Warning Auto on is deselected, and the vehicle's forward speed is above 30 km/h (18 mph), the Parking Safety  button indicator will turn off. Although you drive below 10 km/h (6 mph), Forward Parking Distance Warning will not turn on.**

Distance from object	Warning indicator	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.




### **Reverse Parking Distance Warning**

Reverse Parking Distance Warning will operate under the following conditions.

- The gear is shifted to R (Reverse).

### **i Information**

**Reverse Parking Distance Warning will operate when the vehicle's reverse speed is below 10 km/h (6 mph).**

Distance from object	Warning indicator	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.

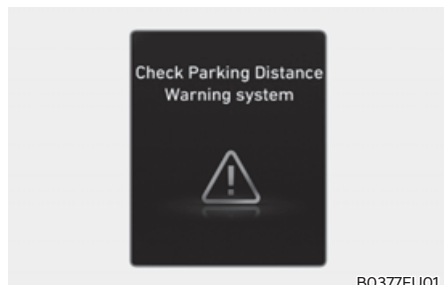
## Forward/Reverse Parking Distance Warning Malfunction and Limitations

### Forward/Reverse Parking Distance Warning malfunction

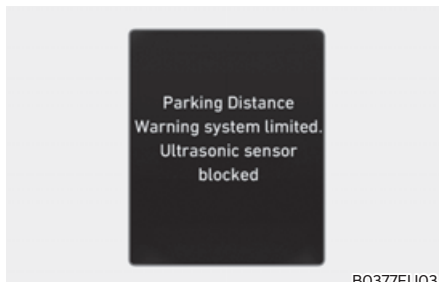
After starting the engine, a beep will sound when the gear is shifted to R (Reverse) to indicate Forward/Reverse Parking Distance Warning is operating properly.

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, have the vehicle inspected by an authorized HYUNDAI dealer.

- The audible warning does not sound.
- The buzzer sounds intermittently.
- The warning message appears on the instrument cluster.



### Parking Distance Warning disabled



If this occurs the warning message appears on the instrument cluster.

Parking Distance Warning will operate properly when snow, rain or foreign material is removed. If Parking Distance Warning does not operate properly after obstruction (snow, rain, or foreign material) is removed (including trailer, carrier, etc., from the rear bumper), have the vehicle inspected by an authorized HYUNDAI dealer.

### **Limitations of Forward/Reverse Parking Distance Warning**

- Forward/Reverse Parking Distance Warning may not operate properly when:
  - Moisture is frozen to the sensor
  - Sensor is covered with substance, such as snow or water (Forward/Reverse Parking Distance Warning will operate properly when such substance is removed.)
  - The weather is extremely hot or cold
  - The sensor or sensor assembly is disassembled
  - The surface of the sensor is pressed hard or hit with a hard object
  - The surface of the sensor is scratched with a sharp object
  - The sensors or its surrounding area is directly sprayed with high pressure washer
- 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 or ice
  - Driving on uneven road, gravel roads or bushes
  - Objects that generates ultrasonic waves are near the sensor
  - License plate is installed in a different spot from the original location
  - The vehicle bumper height or ultrasonic sensor installation has been modified
  - Attaching equipment or accessories next to the ultrasonic sensors
- The following objects may not be detected:
  - Sharp or slim objects, such as ropes, chains or small poles.
  - Narrow objects, such as corners of a square column
  - Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
  - Objects smaller than 100 cm in length and narrower than 14 cm in diameter.
  - Pedestrians, animals or objects that are very close to the ultrasonic sensors.



### **WARNING**

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

## DECLARATION OF CONFORMITY

The radio frequency components  
complies:

### Rear corner radar (if equipped)

■ For USA



The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

OANATEL124

■ For Canada

This device complies with Innovation, Science and Economic Development Canada's licence-

exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired

operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée

aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage,

et

- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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