4. Starting and driving

You can check information regarding the basic equipment for safe driving, auxiliary equipment that helps you to drive comfortably, and how to use such equipment.

An explanation is provided for the START/STOP switch and smart key as well as the driving system including the instrument cluster, gear shift lever, 4WD, cruise control, auxiliary driving systems such as the brake and autonomous emergency braking system, rear and side warning, lane departure warning system, and parking assist system.

START/STOP switch (Smart key)*

OFF status

The power is turned off.

The indicator is turned off.

- The power is not supplied to the electric accessories of the vehicle.

Caution

- **If the gear shift lever is not placed in the P (parking) position, the START/STOP switch cannot be in the OFF status (vehicle power OFF). Also, the vehicle doors cannot be locked and it is impossible to enter the theft monitoring mode.**

Notice

- **When the engine is turned on, make sure to place the gear shift lever in the P (parking) position and turn off the engine by pressing the START/STOP switch.**

ACC status

Some electric accessories can be used.

Orange ACC indicator turns on.

- With the START/STOP switch in the OFF status, press the START/STOP switch once without depressing the brake pedal.
- The power is supplied to the vehicle and some electric accessories can be used.

Caution

- **The START/STOP switch in the ACC status is not the status that the engine is turned on. Using an electric accessory in the vehicle for a long period of time in this status may deplete the battery.**

ON status

Most electric accessories can be used.

Red ON indicator turns on.

- With the START/STOP switch in the OFF status, press the START/STOP switch twice without depressing the brake pedal.
- The power is supplied to the vehicle and most electric accessories can be used.

Caution

- **The START/STOP switch in the ON status is not the status that the engine is turned on. Using an electric accessory in the vehicle for a long period of time in this status may deplete the battery.**
- **If the smart key system is abnormal, the indicator blinks 5 times with the START/STOP switch in the ON status. Have your vehicle checked and serviced at a KG Mobility Authorized Service Center immediately.**

READY status

Possible to start the engine

Green READY indicator turns on.

- This is the status that the gear shift lever is placed in the P (parking) or the N (neutral) position and the brake pedal is depressed for starting the engine.

Warning

- **The engine can also be started after the gear shift lever is placed in the N (neutral) position. However, start the engine after placing it in the P (parking) position for safety.**

Notice

- **After you start the engine, the READY indicator turns off.**

Starting the engine

When you place the gear shift lever in the P (parking) or the N (neutral) position and press the START/STOP switch while depressing the brake pedal, the engine is started.

Starting the engine

1. Get in the vehicle while carrying the smart key.
2. Be sure that all occupants fasten their seat belt.
3. Check for safety that the parking brake is applied.
4. Turn off all electric accessories.
5. Place the gear shift lever in the P (parking) or N (neutral) position.
   - **Manual transmission**
     Place the gear shift lever in the N (neutral) position and depress the pedal.
6. Depress brake pedal.
7. Check if the READY status indicator on START/STOP switch is turned on.
8. If the READY status indicator is turned on, start the engine by pressing the START/STOP switch.

   When the engine is started, the READY indicator turns off.

Warning

- **The engine can also be started also after the gear shift lever is placed in the N (neutral) position. However, start the engine after placing it in the P (parking) position for safety.**

Restarting the engine when it cannot be started

Wait for more than 10 seconds with the START/STOP switch in the OFF status and then press the START/STOP switch again to prevent the starting motor from being damaged.

Caution

- **Do not press and hold down the START/STOP switch or press it repeatedly because the engine cannot be started.**
- **The communication with the smart key system is not smooth on top of the seat where the hea ter function is activated or the floor of the vehicle and the area near the pedal, so the smart key recognition performance may be lowered.**
- **If the engine cannot be started by pressing the START/STOP switch, press the START/STOP switch directly using the smart key or have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

  ☞ Refer to “Starting the engine with the dead smart key or interference, etc. (in the event of emergency)” (p.4-19)
- **Maintaining the START/STOP switch ACC or ON status and using the audio system with the engine turned off may deplete the battery.**

Stopping the engine

The engine can be turned off only when the gear shift lever is placed in the P (parking) position and the brake pedal is depressed.

1. After stopping the vehicle completely, keep the brake pedal depressed.
2. Shift the gear shift lever to the P (Parking - A/T) or N (neutral - M/T) position.
3. Apply the parking brake.
4. Turn off the engine by pressing the START/STOP switch, and then take your foot off the brake pedal (A/T) or clutch pedal (M/T).

Be sure to check that the engine is turned off and if there are any other abnormalities, and get out of the vehicle with the smart key.

Stopping the engine while driving (in the event of emergency)

If you need to turn off the engine in an emergency situation such as an accident or vehicle damage while driving, press and hold down the START/STOP switch for 3 seconds or more, or press it three times within 1.5 seconds.

The engine is turned off and the START/STOP switch is set to the ACC status.

Warning

- **Never turn off the engine while driving unless there is an emergency situation such as an accident or vehicle damage. Doing so may make the steering wheel heavier and lower the brake performance, becoming very dangerous.**

Notice

- **If the vehicle is driving continuously with the engine turned off, you can start the engine again by placing the gear shift lever in the N (neutral) position and pressing START/STOP switch without depressing the brake pedal.**

System safety mode

If a critical system defect occurs or the main electric and fuel systems of the engine are abnormal, the system enters the safety mode in order to protect the vehicle system.

When the vehicle enters the system safety mode, the engine warning light may turn on and the driving performance may decrease or the engine may be turned off.

Caution

- **When the vehicle enters the system safety mode, stop the vehicle at a safe place immediately, turn off the engine, tow your vehicle to a KG Mobility Authorized Service Center through the emergency roadside service and have the relevant system checked and serviced.**
- **If you drive the vehicle in the system safety mode, the engine RPM is fixed, disabling normal driving and the engine may be turned off. Driving the vehicle continuously may damage the system significantly.**

Cautions for using the START/ STOP switch

Warning

- The smart key system allows you to start the engine by pressing the START/STOP switch with the brake pedal depressed within its operation range. Caution should be taken that a person who is unfamiliar with the system such as the engine check and in any other situations, especially a child, may start the engine.
- Never press the START/STOP switch while driving. Doing so may result in a dangerous situation due to the suspension of power supply.

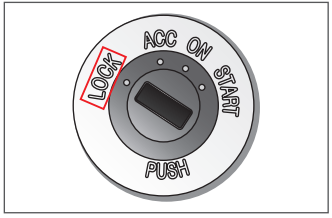
Caution

- Be sure to start the engine with the brake pedal depressed.
- Do not depress the accelerator pedal when starting the engine.
- If the engine cannot be started, wait for 10 seconds or more to prevent the starting motor from being damaged and restart the engine.
- After starting the engine, idle the engine for 1 to 2 minutes and then drive off in the vehicle. In particular, drive the vehicle slowly for approximately 300 m after driving off for smooth rotation of the engine and other driving systems during winter.
- If you open the door and leave the vehicle with the smart key with the START/STOP switch in the ON status or while the engine is running, a warning message is displayed on the instrument cluster with a warning buzzer.
- Pay particular attention not to start the engine when checking the vehicle from the outside, especially the engine room.
- Do not use a non genuine smart key or a replicated key.
- The communication with the smart key system is not smooth on top of the seat where the heater function is activated or the floor of the vehicle and the area near the pedal, so the smart key recognition performance may be lowered.
- The vehicle is controlled by various electronic control units. If you attach and use a device that creates radio waves or electromagnetic waves near the smart key or the vehicle, various vehicle control systems may malfunction.
- When you operate the START/STOP switch while a smartphone is placed near the smart key or charging the smartphone battery through the power socket in the vehicle, the engine may not start occasionally.

Key cylinder (ignition key)

OFF position (LOCK)

The power is turned off.



- The power is not supplied to the electric accessories of the vehicle.

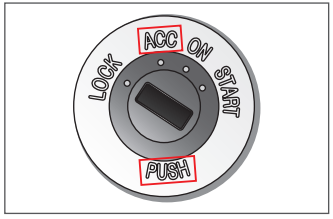
Notice

Key hole illumination

- **When you open the door to get into the vehicle, the light is lit around the key cylinder. If you close the door, the lights will turn off after about 10 seconds.**

ACC position

Some electric accessories can be used.



- The power is supplied to the vehicle and some electric accessories can be used.
- To shift from the ACC position to the OFF (LOCK) position, turn the ignition key while pressing the key cylinder with the ignition key.

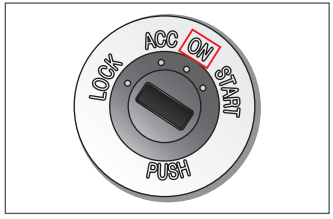
Notice

Key reminder

- **When you open the driver's door with the ignition key inserted in the key cylinder (ACC or LOCK position), a warning beep sounds to inform the driver that the ignition key is inserted in the key cylinder.**

ON position

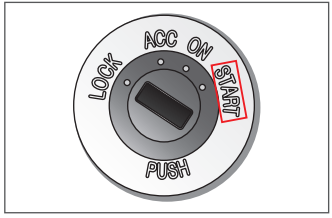
Most electric accessories can be used.



- The power is supplied to the vehicle and most electric accessories can be used.
- It is the position where the ignition key is located when operating the vehicle, with the engine started.

START position

Starting engine



- This is the status that the gear shift lever is placed in the P (parking) or the N (neutral) position and the brake pedal is depressed for starting the engine.
- It is the position to start the engine. Turning the key cylinder to the "START" position will start the engine. Release the ignition key when the engine is started. At this time, the key cylinder returns to the ON position automatically.

Warning

- **The engine can also be started after the gear shift lever is placed in the N (neutral) position. However, start the engine after placing it in the P (parking) position for safety.**

Starting the engine

In order to start the engine, place the gear shift lever in the P (park) or N (neutral) position, insert the ignition key into the key cylinder and turn it to the START position while depressing the brake pedal.

Starting the engine

1. Get on the vehicle with carrying the REKES key (ignition key).
2. Be sure that all occupants fasten their seat belt.
3. Check for safety that the parking brake is applied.
4. Turn off all electric accessories.
5. Place the gear shift lever in the P (parking) or N (neutral) position.
   - **Manual transmission**
     Place the gear shift lever in the N (neutral) position and depress the pedal.
6. Depress brake pedal.
7. Insert the ignition key into the key cylinder.
8. Turn the key cylinder to the START position to start the engine.

Warning

- **The engine can also be started also after the gear shift lever is placed in the N (neutral) position. However, start the engine after placing it in the P (parking) position for safety.**

Restarting the engine when it cannot be started

To prevent damage to the starter motor, wait at least 10 seconds while the ignition key is in the OFF position and turn the key cylinder to the "START" position again.

Caution

- **Do not leave the key cylinder in the START position for more than 10 seconds even if the engine does not start.**
- **Do not turn the key cylinder to the START position once the engine is started. This can damage the relevant components including the starter motor.**
- **If you leave the key cylinder in the ACC or ON position or use the audio system and etc. for an extended period of time with the engine not started, the battery may be discharged.**

Stopping the engine

The engine can be turned off only when the gear shift lever is placed in the P (parking) position and the brake pedal is depressed.

1. After stopping the vehicle completely, keep the brake pedal depressed.
2. Shift the gear shift lever to the P (Parking - A/T) position.
3. Apply the parking brake.
4. Turn off the engine by pressing the START/STOP switch, and then take your foot off the brake pedal (A/T) or clutch pedal (M/T).

Be sure to check that the engine is turned off and if there are any other abnormalities, and get out of the vehicle with the smart key.

Notice

- **Diesel engine learning mode and engine self-cleaning operate in the same way as smart key engine start and engine stop.**

System safety mode

If a critical system defect occurs or the main electric and fuel systems of the engine are abnormal, the system enters the safety mode in order to protect the vehicle system.

When the vehicle enters the system safety mode, the engine warning light may turn on and the driving performance may decrease or the engine may be turned off.

Caution

- **When the vehicle enters the system safety mode, stop the vehicle at a safe place immediately, turn off the engine, tow your vehicle to a KG Mobility Authorized Service Center through the emergency roadside service and have the relevant system checked and serviced.**
- **If you drive the vehicle in the system safety mode, the engine RPM is fixed, disabling normal driving and the engine may be turned off. Driving the vehicle continuously may damage the system significantly.**

Warning

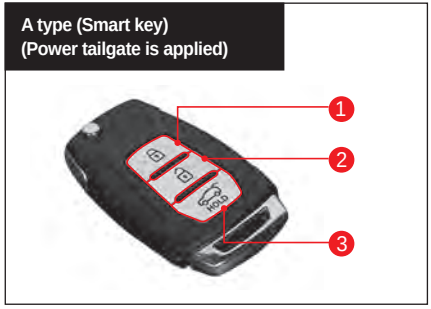
- **Never turn the key cylinder (ignition key) to the OFF (LOCK) position or remove the ignition key while driving. If you operate the key cylinder (ignition key) while driving, the power may be cut off and a dangerous situation may occur.**

Caution

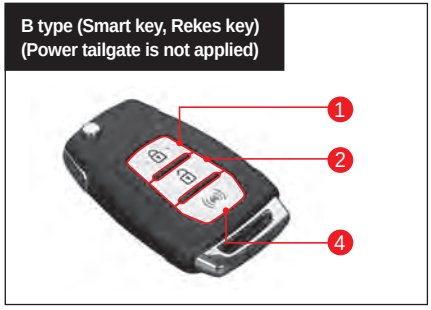
- **Be sure to start the engine with the brake pedal depressed.**
- **Do not depress the accelerator pedal when starting the engine.**
- **If the engine cannot be started, wait for 10 seconds or more to prevent the starting motor from being damaged and restart the engine.**
- **After starting the engine, idle the engine for 1 to 2 minutes and then drive off in the vehicle. In particular, drive the vehicle slowly for approximately 300 m after driving off for smooth rotation of the engine and other driving systems during winter.**
- **If you try to open the door and get off the car with the ignition key inserted in the key cylinder, a warning message will be displayed on the instrument cluster and a warning beep will sound.**
- **Pay particular attention not to start the engine when checking the vehicle from the outside, especially the engine room.**
- **Do not use non-genuine REKES key or replication key.**

Function of each button

A type (Smart key)
(Power tailgate is applied)



B type (Smart key, Rekes key)
(Power tailgate is not applied)



Button	Press briefly	Press and hold down
1 Door lock	Lock the door	
2 Door unlock	Unlock the door (When the safety unlock is set, only the driver seat door is unlocked)	
3 Tailgate (A type)	Stop the operation	Open/close the power tailgate
4 Panic (B type)	-	Activate/ deactivate the panic mode

Locking the door

Pressing the Door lock button (1) briefly locks all doors and the tailgate.

- When switched to the theft deterrent mode, the hazard warning lamp blinks and a buzzer sounds.

	Hazard warning lamp	Buzzer
Smart key (type A/B)	Blinks twice	Sounds once
REKES key (type B)	Blinks twice	-

- If the outside Rearview mirror folding/ unfolding button is in the neutral position, the outside rearview mirror is folded.

☞ Refer to “Folding/unfolding the outside rearview mirror” (p.3-56)

Notice

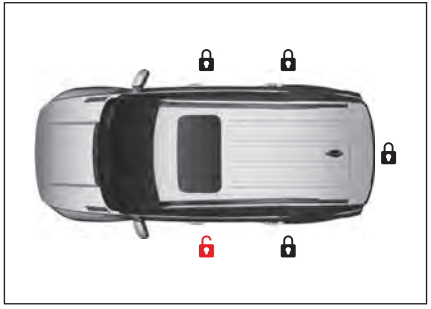
- **If the START/STOP switch is in the ACC or the ON status or the engine is running, the door cannot be locked using the Door lock button.**

Caution

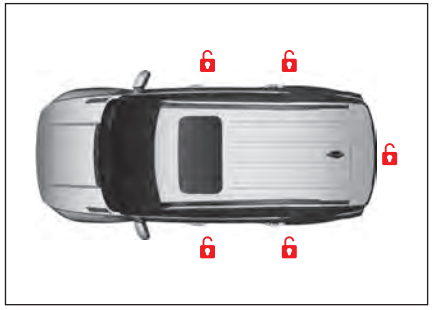
- **The mode can be switched to the theft monitoring mode only when all doors, tailgate and engine hood are closed. When you press the Door lock button with the tailgate or the engine hood open, only the door is locked and the mode is not switched to the theft monitoring mode.**
- **After locking the door using the smart key or rekes key, check that the door and the tailgate are locked directly. If the door is not locked completely, the vehicle or an article inside the vehicle may be stolen.**

Unlocking the door (when the safety unlock is enabled)

- When the safety unlock is enabled, pressing the Door unlock button (2) only unlocks the driver seat door and cancels the theft monitoring mode.



- Pressing the Door unlock button (2) again with the driver seat door unlocked unlocks all doors and the tailgate.



- Pressing the Door unlock button (2) twice in a row unlocks the driver seat door first, then unlocks all doors and cancels the theft monitoring mode.
- When the theft deterrent mode is deactivated, the hazard warning lamp blinks and a buzzer sounds.

	Hazard warning lamp	Buzzer
Smart key (type A/B)	Blinks once	Sounds twice
REKES key (type B)	Blinks once	-

- When the rear view mirror folding / unfolding button is in the neutral position, the rear view mirrors unfold.

☞ Refer to “Folding/unfolding the outside rearview mirror” (p.3-56)

What is safety unlock?

The safety unlock function unlocks only the driver seat door when the Door unlock button is pressed once to prevent entering through a door other than the driver seat door. Pressing the Door unlock button again unlocks all doors and the tailgate.

To set safety unlock

- Tick the box at **User setting** → **Door / Tailgate** → **Press key twice to unlock** under (user settings) in the instrument cluster.

- In theft deterrent mode, if a door, tailgate or engine hood is not opened within 30 seconds after the door is unlocked, all the doors are locked automatically.
- In this case, the system is switched to the theft deterrent mode, the hazard warning lamp blinks and a buzzer sounds.

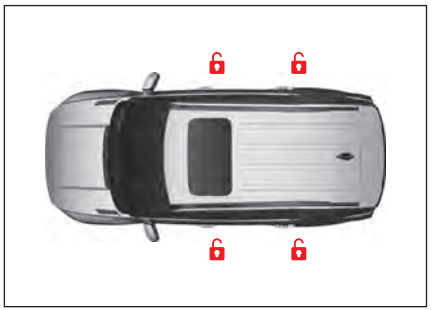
	Hazard warning lamp	Buzzer
Smart key (type A/B)	Blinks twice	Sounds once
REKES key (type B)	Blinks twice	Sounds once

Notice

- **In the event of auto lock after 30 seconds, the rear view mirror will not fold even if the rear view mirror folding / unfolding button is in the neutral position.**

Unlocking the door (when the safety unlock is disabled)

Pressing the Door unlock button (2) briefly unlocks all doors and the tailgate.



- When the theft deterrent mode is deactivated, the hazard warning lamp blinks and a buzzer sounds.

	Hazard warning lamp	Buzzer
Smart key (type A/B)	Blinks once	Sounds twice
REKES key (type B)	Blinks once	-

- If the outside Rearview mirror folding/ unfolding button is in the neutral position, the outside rearview mirror is folded.

☞ Refer to “Folding/unfolding the outside rearview mirror” (p.3-56)

Opening/closing the tailgate (A type)

- You can open or close the tailgate by pressing and holding down the Tailgate button (3).
- Pressing the Tailgate button (3) briefly stops the operation of the power tailgate.
- When you approach within approximately 1 m from the center of the tailgate with the smart key, the smart tailgate operates.

☞ Refer to “Tailgate” (p.3-25)

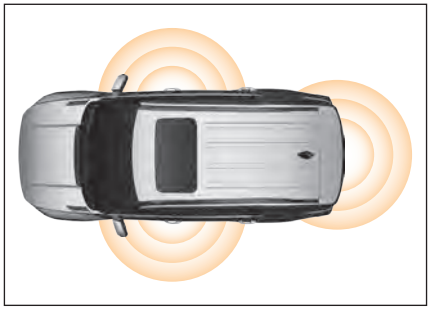
Activating/deactivating the panic mode (B type)

When you press the Panic button in the event of emergency, the hazard warning lamp turns on and the warning buzzer sounds for a certain period of time.

- When you press and hold down the Panic button (4), the hazard warning lamp blinks and the warning buzzer sounds for approximately 30 seconds.
- Pressing and holding down the Panic button (4) again stops the panic mode.

Additional functions

Smart door auto lock (auto close)



When you move a certain distance away from the vehicle while carrying the smart key, all doors and the tailgate are locked automatically.

If you stay in the smart key detection area of the vehicle for 10 minute or more under the above condition, all doors and the tailgate are also locked automatically for theft prevention.

- When the theft monitoring mode is activated, the hazard warning lamp blinks twice and the warning buzzer sounds once.
- If the Outside rearview mirror folding/unfolding button is in the neutral position, the outside rearview mirror is folded.

☞ Refer to “Folding/unfolding the outside rearview mirror” (p.3-56)

Activating the smart door auto lock function (Activating from the instrument cluster)

- Tick the box at **User setting → Door / Tailgate → Smart door auto lock** under  (user settings) in the instrument cluster.

Activating the smart door auto lock function (Activating with the smart key)

1. With the START/STOP switch in the ON status, press the hazard warning lamp switch.

   The hazard warning lamp turns on.

2. Press the Door lock button on the smart key three times consecutively within 2 seconds.

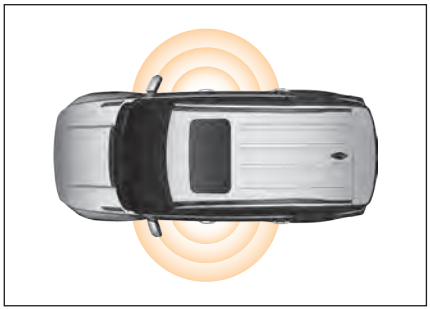
Notice

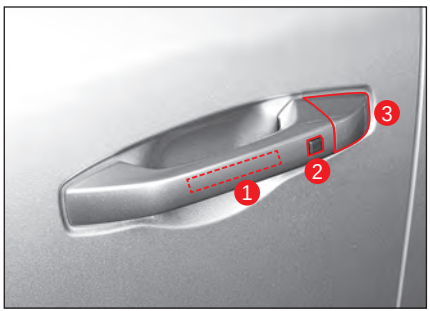
- **The smart door auto lock is carried out only if the smart key is detected near the vehicle (in the outside antenna area) when you close the door.**
- **The detection of the smart key varies depending on the walking speed and surrounding environment.**
- **If the smart key is present inside the vehicle, the smart door auto lock function is not activated.**
- **If the smart key battery is depleted, the smart door auto lock function is canceled automatically. Replace the smart key battery and activate it again from  (User Settings) on the instrument cluster.**

Caution

- **When you lock the door using the smart door auto lock function, check that the hazard warning lamp blinks twice and the warning buzzer sounds once. If the door is not locked completely, the vehicle or an article inside the vehicle may be stolen.**

Locking/unlocking the door with the door handle switch





1. Outside antenna
2. Door lock/unlock button
3. Mechanical key hole

To lock with door handle switch

1. Stay in the outside antenna area of the vehicle (approximately 1 m) while carrying the smart key.
2. Press the door lock / unlock button (2) with all the doors and tailgate closed.
3. All the doors and tailgate are closed.
   - When the theft monitoring mode is activated, the hazard warning lamp blinks twice and the warning buzzer sounds once.
   - If the Outside rearview mirror folding/ unfolding button is in the neutral position, the outside rearview mirror is folded.

☞ Refer to “Folding/unfolding the outside rearview mirror” (p.3-56)

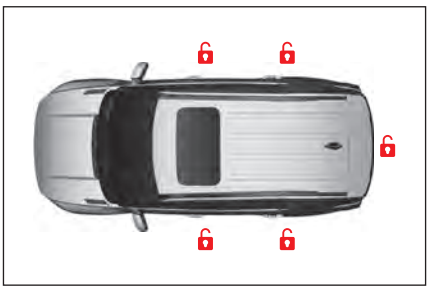
Notice

- **It is not possible to lock the door with the door lock / unlock button when the ignition switch is in ACC or ON position or the engine is started.**

To unlock with door handle switch (when the safety unlock is disabled)

1. Stay in the outside antenna area of the vehicle (approximately 1 m) while carrying the smart key.
2. Press the door lock / unlock button (2).
   - Once the smart key authentication is completed, all the doors and tailgate are unlocked.
   - When the theft monitoring mode is activated, the hazard warning lamp blinks twice and the warning buzzer sounds once.
   - If the Outside rearview mirror folding/ unfolding button is in the neutral position, the outside rearview mirror is folded.

☞ Refer to “Folding/unfolding the outside rearview mirror” (p.3-56)



3. Open the driver seat door by pulling the door handle slowly.

To unlock with door handle switch (when the safety unlock is enabled)

1 Stay around the driver's door outside antenna area (within approx. 1m) with a smart key.

2 Press the door lock / unlock button (2).

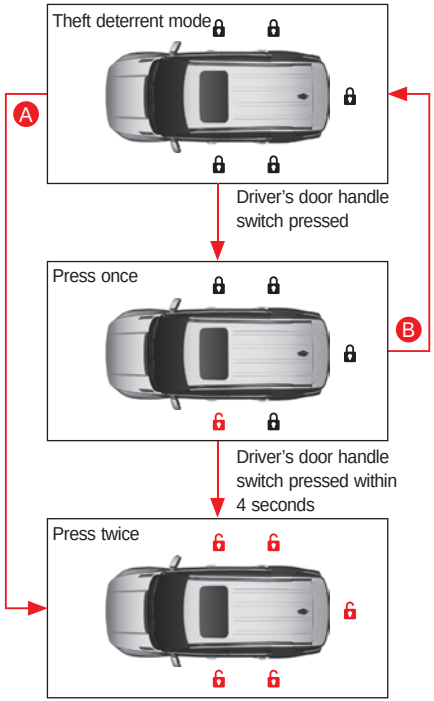
- Once the smart key authentication is completed, only the driver's door is unlocked.
- The hazard warning lamp flashes once and buzzer sounds twice indicating that the theft deterrent mode is deactivated.

3 Open the door by pulling the door handle slowly.

- Press the door lock / unlock button (2) one more time within 4 seconds with the driver's door unlocked if you want to unlock all the doors and tailgate.
- All the doors and tailgate are unlocked.
- The hazard warning lamp flashes once and buzzer sounds twice when all the doors are unlocked.

Notice

- **When you press the passenger's door handle lock / unlock button with the safety unlock set, all the doors are unlocked.**
- **When you press the driver door lock / unlock button 4 seconds after the driver door is unlocked, all doors will be locked and the system enters the theft deterrent mode.**
- Tick the box at **User setting → Door / Tailgate → Press key twice to unlock** under (user settings) in the instrument cluster.



A When button other than driver's door lock / unlock button pressed

B When driver's door lock / unlock button pressed 4 seconds after driver door unlocked

Cautions for using smart key / REKES key

Warning

- Do not leave the vehicle with the smart key in the vehicle when a person (especially a child) who does not know the vehicle system is present in the vehicle. Pressing the START/STOP switch with the brake pedal depressed while the smart key is in the vehicle starts the engine. Other incorrect vehicle controls may occur. In such case, a serious accident may occur. Therefore, always pay attention.

Caution

If the smart key does not operate or is not recognized

- When you lock the door with the door handle lock / unlock button or another smart key outside the vehicle with the smart key inside the vehicle, the smart key in the vehicle will be disabled temporarily (buzzer sounds).

  To restore to the original function, deactivate the theft deterrent mode by using the smart key outside the vehicle or door handle lock / unlock button.
- If the vehicle is in a place where strong radio waves are transmitted or received, if the vehicle is equipped with a two-way radio or other transmission and reception systems or if a smart key is used in another nearby vehicle, the smart key system may not function normally.
- The smart key recognition performance may be lowered on a blind spot above the seats where the heater function is activated or the floor of the vehicle and the area near the pedal, so the smart key system may not function. In such case, carry the smart key or place the smart key in a different location.
- If the engine cannot be started while the smart key is placed inside the vehicle or you are carrying it, start the engine by pressing the START/STOP switch with the smart key directly.
- If the smart key is near the outside windshield or the door glass, the smart key may be recognized as being present inside the vehicle. In this case, the smart key system may not operate normally.

Using the smart key

- Carry only one smart key.
- Store each smart key separately. When you lock the door using the LOCK touch sensor on the door handle instead of the Door lock/unlock button on the smart key, be careful not to leave the smart key inside the vehicle.
- If you leave the vehicle even for a moment, turn off the engine and carry the smart key with you and do not store a spare smart key inside the vehicle. Failure to do so may cause vehicle theft or malfunction.
- Using 2 smart keys provided by KG Mobility Corporation on one key chain at the same time may cause the smart key system to malfunction or engine starting failure.

Managing the smart key

- When you lock the door with another smart key with the previously used smart key in the vehicle, the door can be locked normally but you cannot start the engine with the key left in the vehicle until it is used normally next time. This is a safety system for preventing theft.

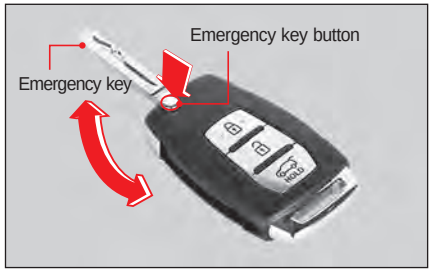
- **Do not allow water or liquid to flow into the smart key. Caution should be taken as the smart key is not fully waterproof, so if moisture or water gets in, it may cause a malfunction that is not covered by the warranty.**
- **The electronic systems in the smart key are vulnerable to moisture or heat, so placing the smart key in a place with high humidity or high temperature may cause a failure.**
- **If the smart key is lost, you cannot open the door or start the engine. If you don't have a spare smart key in storage, you need to have your vehicle towed and serviced at a KG Mobility Authorized Service Center. Also, the vehicle or an article in the vehicle may be lost due to the lost smart key, so take measures immediately.**

Cautions for using door handle lock / unlock button

- **Anyone within the operating range of the smart key can unlock the door with the door handle lock / unlock button. Be careful of theft.**
- **Do not operate locking or unlocking as soon as you lock / unlock the door.**

Using the emergency key

Unfolding/folding the emergency key



- Pull out the emergency key from the key body by pressing the Emergency key button on the smart key/rekes key.
- To fold the emergency key, fold the emergency key with the Emergency key button pressed.

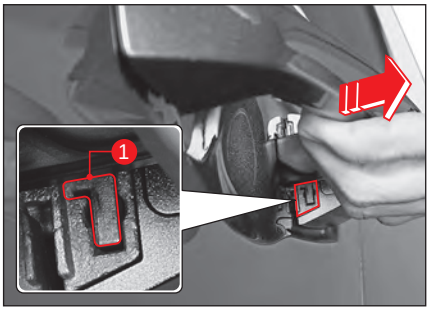
Caution

- **Folding the emergency key forcibly without pressing the Emergency key button may damage the smart key.**

Locking/unlocking the door using the emergency key

If the door cannot be locked or unlocked due to reasons including the depletion of the smart key battery, interference, and the depletion of the vehicle battery, the emergency key (auxiliary key) can be used.

1 Pull the driver seat door handle in the arrow direction in a way that the Emergency key hole cover open button (1) is visible.



2 Press the Emergency key hole cover open button (1) using the emergency key.

3 With the Emergency key hole cover open button (1) pressed, push down the top side of the emergency key hole cover to remove it.

Caution

- **Be careful not to create a scratch on the driver seat door panel or lose the emergency key hole cover.**

4 Insert the emergency key into the key hole and do as follows.

- To lock the door, turn it in the lock direction (2).
- To unlock the door, turn it in the unlock direction (3).

Notice

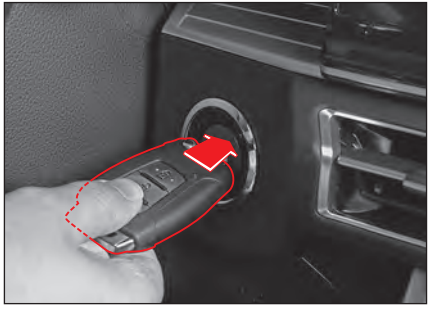
- **When unlocking in the theft monitoring mode, the warning buzzer sounds.**

Starting the engine with the dead smart key or interference, etc. (in the event of emergency)

You may not be able to start the engine with the START/STOP switch due to the depletion of the battery in the smart key or interference even if you are carrying the smart key in the vehicle.

In such case, take a measure as follows, replace the smart key battery or check the smart key.

Place the gear shift lever in the P (parking) or the N (neutral) position and start the engine by pressing the START/STOP switch directly with the smart key with the brake pedal depressed.



Notice

- **If the warning buzzer is sounding, it stops.**
- **If you open the door while the engine is running when the smart key battery is depleted, a warning message saying "The smart key is not in the vehicle" appears. In such case, when you turn off and start the engine again, the warning message disappears.**

Replacing the smart key/rekes key battery

If the operation range of the smart key/rekes key has decreased significantly or the smart key/rekes key malfunctions occasionally, replace the smart key/rekes key battery.

Battery standard	One CR2032 battery

1 Remove the cover at the back of the smart key/rekes key carefully using a flat-bladed screwdriver for watches (smallest one) not to create a scratch.

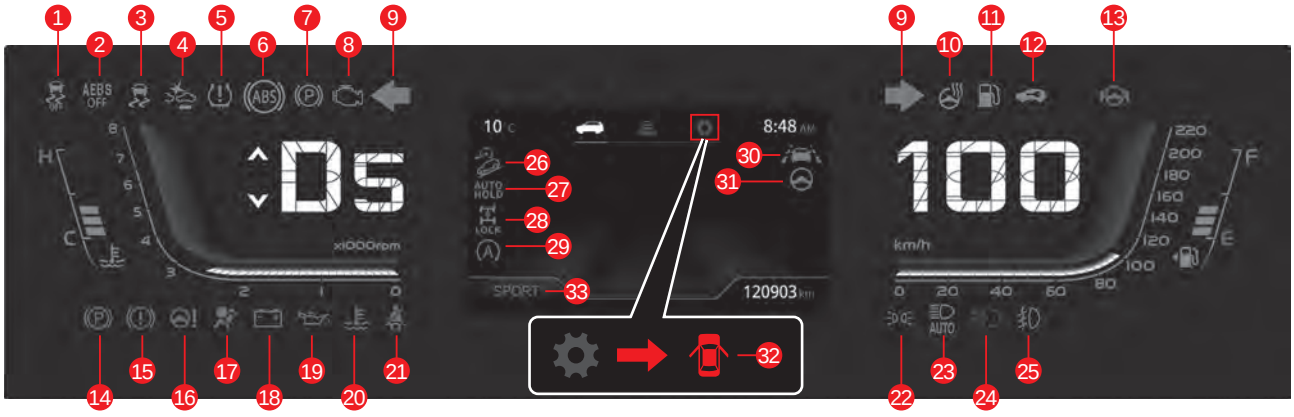
2 Insert the battery with the positive (+) terminal facing up and the negative (-) terminal facing down.

3 Return the cover from the back of the smart key back to its original position.

After replacing the battery, be sure to check if the remote control key operates normally.

Caution

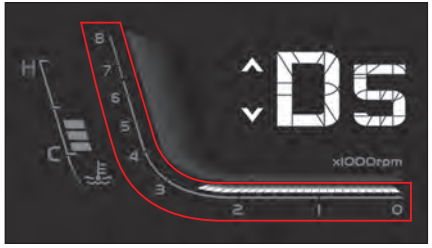
- **The circuit inside the smart key/rekes key is vulnerable to static electricity, so if you are not skilled in replacing the battery, have the smart key/rekes key checked and the battery replaced at a KG Mobility Authorized Service Center.**
- **Be sure to replace the battery with one that meets the standard. Using a battery that does not meet the standard may cause the smart key/rekes key to be inoperable due to contact failure.**
- **Be careful not to switch the direction of the positive (+) terminal and negative (-) terminal when inserting the battery.**
- **Since the battery may contaminate environments, discard it in a proper way.**



1. Electronic stability control (ESC) OFF indicator lamp
2. Autonomous emergency braking (AEB) OFF indicator lamp
3. Electronic stability control (ESC) ON indicator/warning lamp
4. Autonomous emergency braking (AEB) warning lamp
5. Global warning lamp
6. Anti-Lock brake system (ABS) warning lamp
7. Electronic parking brake (EPB) warning lamp
8. Engine CHECK warning lamp
9. Turn signal lamp/hazard warning lamp
10. Steering wheel heating ON indicator lamp
11. Low fuel level warning lamp
12. Immobilizer/Smart key warning lamp
13. Hands OFF warning lamp
14. Parking brake ON indicator (red)
15. Brake warning lamp
16. Electric power steering warning light
17. Air bag warning lamp
18. Charge warning lamp
19. Engine oil pressure warning light
20. Engine overheat warning lamp
21. Seat belt reminder warning lamp
22. Illumination ON indicator
23. Smart high beam (SHB) indicator lamp
24. High beam indicator
25. Front fog lamp
26. Hill descent control (HDC) ON indicator / warning lamp
27. AUTO HOLD indicator / warning lamp
28. 4WD LOCK indicator and 4WD CHECK warning lamp
29. ISG indicator/warning lamp and ISG OFF indicator lamp
30. LKAS indicator lamp
31. Center lane keep assistance (CLKA) ON indicator lamp
32. Door ajar warning lamp
33. WINTER mode indicator and SPORT mode indicator

Driving Information Display

Engine RPM



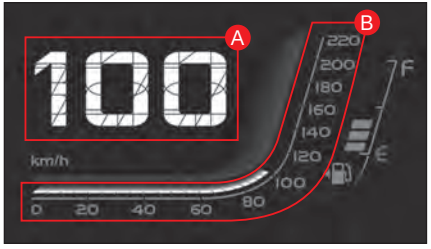
It shows the engine's revolution per minute (RPM) in bar form.

Since one bar represents 1,000 rpm, multiply the number displayed by the bar by 1,000 to get the current engine rotation speed.

Notice

- **There are a total of 8 bars for engine speed, and it can display up to 8,000 RPM.**

Driving Speed



It displays the current speed of the vehicle in the form of both digital numbers (A) and a bar (B).

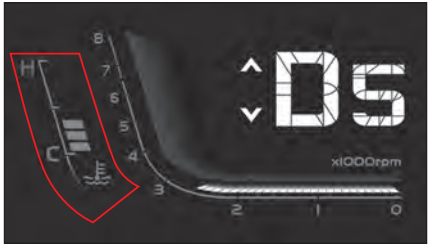
Caution

- **Drive carefully and safely in school zones as unforeseen hazards may arise.**

Over speed warning light (GCC only)

Sounds warning chime 5 times initially

Engine Coolant Temperature

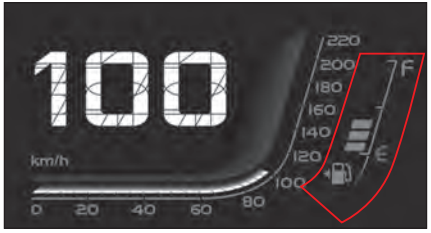


This gauge indicates the engine coolant temperature.

Caution

- **If the coolant thermometer gauge points near the engine overheating range (H) or the engine overheating warning lamp illuminates, immediately stop the vehicle in a safe place and cool down the engine. If the engine is overheated, continued operation of the vehicle may seriously damage the engine.**

Fuel gauge



It displays the remaining fuel level when the START/STOP switch is in the ON status or the engine is running.

Refuel before the pointer of the fuel gauge reaches “E”. If the low fuel level warning light turns on, refuel immediately.

The left arrow in the gas pump icon (◂⛽) indicates that the fuel inlet is located on the left side of the vehicle.

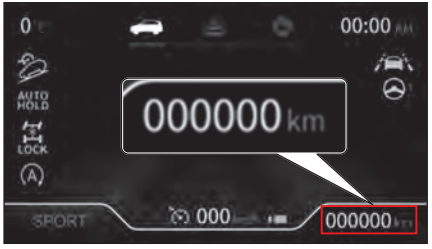
Warning

- **Be sure to stop the engine when refueling.**

Caution

- **If the vehicle is on a hillside road, the remaining fuel level may not be displayed accurately.**
- **Use only the designated fuel and approved additives. Failure to do so may cause contamination of the fuel tank or clogging of the fuel filter, damaging the engine.**
- **Drive the vehicle with a proper fuel level. Failure to do so may damage the catalytic converter due to the non-combustion or incomplete combustion of fuel.**

Total mileage



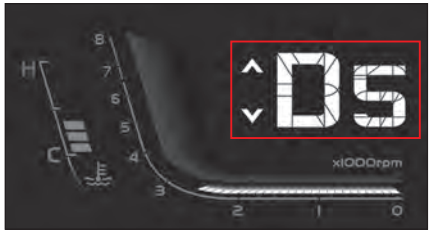
The total mileage of the vehicle is displayed in kilometers. The maximum mileage to be displayed is 999999 km.

Notice

- **It is normal if the total mileage at the time of shipping is less than 50 km.**

4

Position of gear shift lever



It displays the current position (P, R, N, D) of the gear shift lever and the gear stage (1~6stages) in the M (manual) mode.

Gear position display in D (automatic) mode

In automatic shift mode, the current gear position is displayed depending on the driving condition.

Gear shift point indicator in manual mode

Gear shift point indicator is a supplementary function indicating the optimal shift point for fuel efficiency. The shift point may vary according to road and driving conditions.

This indicates the most appropriate timing for shifting to the 4th gear when the vehicle travels in 3rd gear.

Notice

- **While driving in M (manual) mode, the transmission may automatically shifts up to protect the system if the engine RPM gets high.**
- **In M (manual) mode, the arrows do not appear separately when downshifting while traveling in 2nd to 6th gears. Drive shifting manually according to driving conditions. If driving without manual shift, RPM will get low and the system will shift down.**
- **Gear shift point indicator differs and may not be available depending on vehicle specifications.**

Manual transmission display

Gear shift point indicator is a supplementary function indicating the optimal shift point for fuel efficiency. The shift point may vary according to road and driving conditions.

This indicates the most appropriate timing for shifting to the 4th gear when the vehicle travels in 3rd gear.

Notice

- **Drive shifting manually according to driving conditions.**
- **Gear shift point indicator differs and may not be available depending on vehicle specifications.**

Warning lights and indicators

Seat belt warning lamp

If the driver seat and front passenger seat occupants do not fasten the seat belt, the seat belt warning light blinks along with a warning buzzer.

If you fasten the seat belt at this time, the warning buzzer stops and the seat belt warning light stays on for the remaining time.

☞ Refer to “Seat belt warning” (p.2-2)

Air bag warning lamp

The air bag warning lamp turns on when the START/STOP switch is in the ON status, and it turns off when there is no abnormality in the air bag system.

If the warning light stays on after starting the engine, the air bag system is abnormal. Have your vehicle checked and serviced at a KG Mobility Authorized Service Center immediately.

☞ Refer to “Air bag*” (p.2-20)

Engine oil pressure warning light

The engine oil pressure warning light turns on when the START/STOP switch is in the ON status and it turns off when the engine is started.

This warning light turns on when the engine oil is insufficient or the engine lubrication system is abnormal.

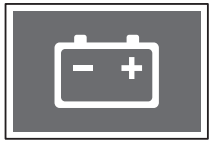
When this warning light turns on while driving, park your vehicle at a safe place, check the engine oil level and add engine oil immediately if it is insufficient.

☞ Refer to “Replenishment” (p.6-9)

Caution

- **If the warning light stays on after the engine oil is added, stop driving the vehicle immediately and have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**
- **Driving the vehicle continuously with the engine oil pressure warning light turned on may damage the engine significantly.**

Charge warning light



The charge warning light turns on when the vehicle battery is depleted or the charging system is abnormal.

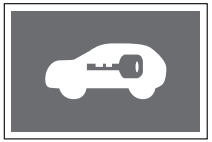
Caution

- **If the charge warning light turns on, it indicates that the charging system is abnormal. Have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Notice

- **Even if the charge warning light does not turn on, the engine may not be started if the battery is not charged smoothly due to insufficient tension of the engine fan belt.**

Immobilizer/smart key warning light



If the smart key system is abnormal or the smart key (transponder) authentication fails, the warning light blinks.

Caution

- **If the warning light blinks continuously, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Engine overheat warning lamp

If the temperature of the engine coolant is abnormally high, the engine overheat warning lamp blinks and the warning buzzer sounds.

If this warning light turns on, park your vehicle at a safe place immediately and cool down the engine.

☞ Refer to “When the engine is overheated so that the warning light turns on” (p.5-6)

Caution

- **If the engine coolant temperature gauge points out near the engine overheating range (H), park your vehicle at a safe place immediately and cool down the engine.**
- **Driving the vehicle continuously with an overheated engine may damage the engine significantly. Cool down the engine properly and have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Electric power steering warning light

The electric power steering warning light turns on when the ignition switch is turned on and turns off when the ignition is turned on.

This warning lamp lights on in the event of faulty electric power steering (EPS) system.

Caution

- **If the electric power steering warning light comes on or the steering wheel feels heavy, please have it checked and serviced a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Notice

- **If you keep the steering wheel turned to the left or right all the way while the vehicle is stationary, the warning light will blink as the steering wheel becomes heavy. This is a safety feature to protect the system and will return to normal after some time.**
- **The EPS (Electronic Power Steering) system is mounted in the steering handle. This system includes functions to compensate the steering power, interlocking with ESC, the supplementary driving safety system, when cornering or braking on the road with different friction. You may feel some difference in steering when these functions are in operation.**

Parking brake ON indicator (red)

The parking brake ON indicator comes on when the parking brake is applied.

ABS (Anti-Lock Brake System) warning light

The ABS warning light turns on when the START/STOP switch is in the ON status and turns off approximately 4 seconds later.

This warning light turns on when the ABS system is abnormal.

Warning

- **If the ABS warning light turns on, the ABS function does not operate and only normal brake function operates. In such case, have your vehicle checked and serviced at a KG Mobility Authorized Service Center immediately.**

Notice

- **A vehicle equipped with the ABS system has the self-diagnosis function to check the internal hydraulic system to see if there is an abnormality by transferring the hydraulic pressure to the internal hydraulic system after the engine is started. At this time, a vibration and a noise may occur at the brake pedal. This indicates that the ABS is functioning normally.**

Brake warning lamp

When the ignition switch is in the “ON” position, the electronic brake-force distribution (EBD) warning lamp comes on and then goes out after about 4 seconds.

If the EBD (Electronic Brake-Force Distribution) system is faulty its warning lamp comes on.

In such case, drive the vehicle carefully since the vehicle may become unstable if you apply sudden braking.

Warning

- **If the EBD warning light turns on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center immediately.**
- **If the EBD warning light turns on, the EBD function as well as the ABS function do not operate.**
- **Driving the vehicle continuously with insufficient brake fluid lowers the brake performance since the pressure of brake fluid cannot be transferred normally.**

Notice

Driving the vehicle with insufficient brake fluid causes the brake warning light to operate as follows.

- **Turn on: When driving the vehicle at a speed of approximately 10 km/h or less**
- **Blink: When driving the vehicle at a speed of approximately 10km/h or higher for 2 seconds or more**

Electronic Parking Brake (EPB) warning light

The Electronic Parking Brake (EPB) warning light turns on when the START/STOP switch is in the ON status and turns off approximately 4 seconds later.

The amber warning light will come on in the event of the faulty electric parking brake (EPB) system.

Warning

- **If the Electronic Parking Brake (EPB) warning light turns on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**
- **If you need to park the vehicle with the parking brake not functioning due to the failure of the Electronic Parking Brake (EPB) in an emergency, stop the vehicle on safe flat ground and place the gear shift lever in the P (parking) position.**

AUTO HOLD indicator/warning light

When you press the AUTO HOLD button, the AUTO HOLD system enters the ready mode and the white AUTO HOLD indicator on the instrument cluster turns on.

When you press the AUTO HOLD button again, the AUTO HOLD indicator turns off and the AUTO HOLD system is deactivated.

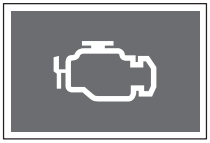
The color of the AUTO HOLD indicator changes as follows according to the status.

- White indicator: AUTO HOLD system in ready mode
- Green indicator: AUTO HOLD system is activated
- Yellow indicator: AUTO HOLD system is abnormal

Warning

- **If the yellow warning light turns on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Engine check indicator



The engine check indicator turns on when the START/STOP switch is in the ON status and turns off the engine is started.

This indicator turns on when various sensors and devices related to engine control (including automatic transmission) are abnormal.

Warning

- **If the engine check indicator turns on when you stop the engine, refuel and drive the vehicle again due to an empty fuel tank, the power output may decrease while driving for a certain distance (approximately 30 km).**
- **If the engine check indicator turns on while driving or occasionally, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**
- **If the engine check indicator turns on, the driving performance of the engine may decrease or the engine may stall. This symptom indicates that the vehicle enters the system safety mode in order to protect the vehicle systems. In such case, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Steering wheel heater indicator*

If you press the Steering wheel heater button with the START/STOP switch in the ON status or while the engine is running, the steering wheel heater indicator turns on or turns off.

Notice

- **When the steering wheel heater indicator turns on, the heater ON/OFF status message is displayed on top of the display of the instrument cluster for approximately 5 seconds.**

Electronic stability control system (ESC) ON indicator/warning light

The ESC ON indicator turns on when the START/STOP switch is in the ON status and turns off approximately 4 seconds later.

- Indicator blinks: When the ESC function is activated
- Warning light turns on: When the ESC system is abnormal

Caution

- **If the ESC ON warning lamp turns on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Electronic stability control system (ESC) OFF indicator

The ESC OFF indicator turns on when the START/STOP switch is in the ON status and turns off approximately 4 seconds later.

Pressing and holding down the ESC OFF switch (approximately 3 seconds or more) deactivates the ESC function and the ESC OFF indicator turns on.

☞ Refer to “When it is necessary to deactivate the ESC function” (p.4-140)

Low fuel level warning light

If the remaining fuel level is insufficient, the low fuel level warning light turns on. However, the time for the warning light to turn on may vary depending on the vehicle status or the degree of slope.

Refuel before the low fuel level warning light turns on if possible.

If this warning light turns on, do not drive the vehicle for a long distance and refuel immediately.

☞ Refer to “Fuel inlet” (p.3-34)

Notice

- **If you drive the vehicle on a steep road or a bumpy road with low fuel level, the low fuel level warning light may turn on.**

Global warning light

The global warning light turns on when the START/STOP switch is in the ON status and turns off approximately 4 seconds later.

If the tire pressure monitoring system (TPMS) is abnormal, the global warning light blinks (for approximately 70 seconds) and then stays on. This warning light also turns on if the tire pressure is abnormal (underinflated/overinflated/flat).

☞ Refer to “Tire pressure monitoring system (TPMS)*” (p.2-29)

Warning

- **If the global warning light turns on, be sure to park your vehicle at a safe place and check the tire pressure. If this warning light stays on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Autonomous Emergency Braking (AEB) warning light

The AEB warning light turns on when the START/STOP switch is in the ON status and turns off approximately 4 seconds later.

If the collision with a front vehicle is expected with the AEB function activated, the AEB warning light operates as follows along with a warning buzzer.

- Blink: The AEB is operating (It operates for 5 second when a collision warning is given.)
- Turn on: The AEB is abnormal

☞ Refer to “Autonomous Emergency Braking (AEB)*” (p.4-148)

Autonomous Emergency Braking (AEB) OFF indicator

The AEB OFF indicator turns on when the START/STOP switch is in the ON status and it turns off approximately 4 seconds later.

When the AEB is deactivated and the ESC function is disabled, the AEB indicator turns on, stopping the AEB operation.

Hill Descent Control (HDC) ON indicator/warning light

When you press the HDC switch, the system is switched to the HDC operation ready status and the green HDC indicator turns on.

When you press the HDC switch again, the indicator turns off and the HDC function is deactivated.

The HDC ON indicator operates as follows according to the status.

- Green indicator turns on: The HDC is in ready status.
- Green indicator blinks: The HDC is operating.
- Red warning light turns on: The HDC system is overheated and abnormal.

☞ Refer to “Hill Descent Control (HDC)” (p.4-141)

Caution

- **When the red warning light turns on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

LKA (LDW) indicator / warning lamp*

Pressing the lane keeping assistance (departure) switch activates the lane keeping and lane departure alerts depending on the vehicle setting.

- White indicator turns on: The lane departure system is in ready status.
- Green indicator turns on: The lane departure system is operating normally.
- Yellow warning light turns on: The lane departure system is abnormal.

☞ Refer to “LDW (Lane Departure Warning)*” (p.4-165)

☞ Refer to “LKA (Lane Keeping Assistance)*” (p.4-169)

Warning

- **If the yellow warning light turns on or blinks, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Centering lane keeping assist (CLKA) indicator / warning lamp

The centering lane keeping assist (CLKA) ON indicator comes on and CLKA is activated.

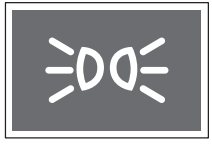
- White indicator illuminated: system in standby
- Green indicator illuminated: system normal operation
- Yellow warning lamp illuminated: faulty system

☞ Refer to “Centering Lane Keeping Assist (CLKA)” (p.4-176)

Warning

- **If the amber warning lamp is lit or flashes, have the vehicle checked and serviced at a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Illumination ON indicator



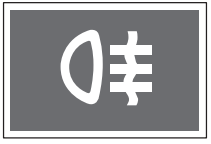
When you turn on the head light or the tail light using the light switch, the illumination ON indicator turns on.

Front fog lamp ON indicator*

When you place the light switch in (front fog light) position with the head light or the tail light turned on, the front fog light turns on and the indicator turns on.

For a vehicle equipped with the Daytime Running Light (DRL), when you place the light switch in the (front fog light) position with the switch in the ON status, the front fog light turns on.

Rear fog lamp ON indicator*



With the headlights turned on, if you rotate the switch in position, rear fog lights turn on and the switch returns back in front fog light position. Rear and front fog lights turn on simultaneously.

SHB indicator*

The SHB indicator turns on when the START/STOP switch is in the ON status and turns off approximately 4 seconds later.

When you push the switch in the direction of the instrument cluster with the light switch in the AUTO position, the SHB is activated and the indicator turns on.

☞ Refer to “Smart High Beam (SHB)*” (p.3-41)

Caution

In any of the following cases, the SHB may not operate normally.

- **When the vehicle windshield is damaged or contaminated by dust, mist, fog, sticker, snow, etc**
- **When the lamp of an oncoming vehicle or a vehicle at the front is damaged**
- **When an oncoming vehicle or a vehicle at the front is out of your front sight**
- **When an oncoming vehicle and a vehicle at the front are recognized only partially in an intersection or a winding road**
- **When there is a light source similar to a vehicle lamp or a reflector at the front**
- **When an illuminator or a reflector is installed in a construction section, etc.**

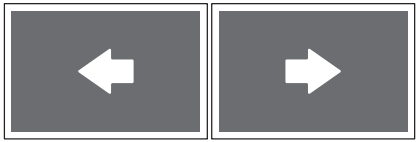
High beam indicator

When you push the light switch in the direction of the instrument cluster and release it, the high beam turns on and the high beam indicator turns on.

Warning

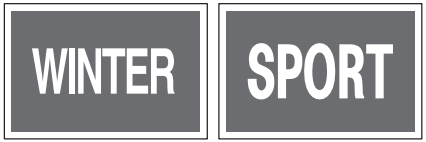
- **Driving the vehicle with the high beam turned on may block the vision of the driver in an oncoming vehicle and interfere with safe driving. Therefore, use the high beam only if the surrounding is too dark or it is difficult to predict the front situation when you drive at night.**

Turn signal/hazard warning lamp



- When you push the light switch down, the left turn signal blinks.
- When you push the light switch up, the right turn signal blinks.
- When you push the hazard warning lamp switch, the left and right turn signals blink at the same time.

WINTER / SPORT indicator lamp



Pressing the drive mode switch in normal driving condition will change the mode as follows:

- NORMAL → SPORT → WINTER → NORMAL

WINTER mode is a function to minimize slippage when starting off on the slippery road surface in winter.

Caution

- **If both the WINTER and SPORT mode indicators are lit simultaneously because of the system failure, have the system checked and serviced by a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Notice

- **There is no indicator lamp for NORMAL driving.**

Hands OFF warning lamp*

If the driver releases his/her hands from the steering wheel for a certain period of time during LKA and Intelligent Cruise Control operation, a beep sounds and the warning light turns on.

Notice

- **The hands OFF warning lamp is fitted only to the vehicles with standard type.**

ISG indicator/warning lamp*

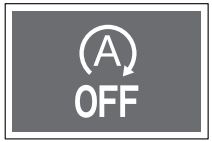
Depending on the ISG operation status, the ISG indicator and warning lamp are operated as follows:

- Green indicator ON : Engine stops due to system operation
- Amber warning lamp ON : faulty ISG system

Caution

- **If the amber warning lamp is lit, have the vehicle checked and serviced at a KG Mobility Dealer or KG Mobility Authorized Service Center.**

ISG OFF indicator*



When you press the ISG ON/OFF switch, the indicator is lit. Press the switch again to turn off the indicator.

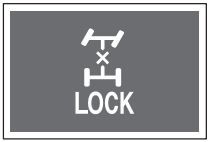
If you do not want to use the ISG system, press the ISG ON/OFF switch to turn off the ISG system.

4WD CHECK warning lamp*

The 4WD CHECK warning lamp is turned on and then off after about 4 seconds when the ignition switch is turned on.

- **ON**
  - Turns on when there is a temporary error in the 4WD system or an error in the related system.
  - A temporary error is resolved after a period of time or when the engine is restarted. In this case, the 4WD system is normal.
- **Blinks**
  - The 4WD CHECK warning lamp blinks to prevent damage to the 4WD system due to overheating. If the warning lamp blinks, immediately stop using the accelerator pedal and allow the 4WD system to cool down sufficiently.
  - If the 4WD system is sufficiently cool and the warning lamp no longer flashes, the 4WD system will operate normally.

4WD LOCK ON indicator*



The 4WD LOCK indicator is turned on and then off after about 4 seconds when the ignition switch is turned on.

Pressing the 4WD LOCK switch turns on the 4WD LOCK indicator.

Pressing the 4WD LOCK switch again turns off the indicator and disables 4WD LOCK.

Over speed warning light (GCC only)

The warning light flashes with repeated (5 times) buzzer sound when the vehicle speed exceeds 120 km/h.

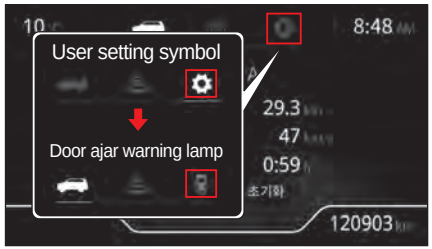
If the warning light flashes, slow down for your own safety.

Door open warning light

The door open warning light turns on when a door or the tailgate is opened or not closed completely.

Warning

- **Confirm that all doors and the tailgate are closed completely before driving. Driving the vehicle with a door or the tailgate opened may cause a serious risk to the safety of occupants.**



If the door or tailgate is open or not fully closed, the LCD screen (user setting symbol position) will display the door ajar warning lamp.

(User setting symbol changed to door ajar warning lamp)

Master symbol

If the vehicle has a warning message, the master symbol will illuminate.

If the master symbol is illuminated, be sure to check the vehicle warning message.

Notice

- **You can check the vehicle warning message(s) in the User Settings in the instrument cluster.**
- **When the warning message is not found, the corresponding item is not displayed.**

Main menu

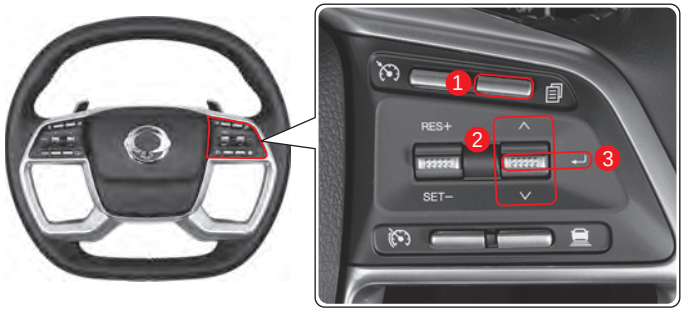
You can check the driving information of the vehicle including mileage and driving time orchange the settings through the main menu from the display of the instrument cluster.

1 Press the (menu) button on the right side of the steering wheel.
- The display moves to the main menu list.
- Go to upper menu when entering User Settings menu.

2 Move to the desired submenu by raising or lowering the MOVE (moving) lever.

3 Press the (select) button briefly to enter the menu, change the setting and confirm.

Pressing and holding down the (selection) button resets the driving information of the vehicle.



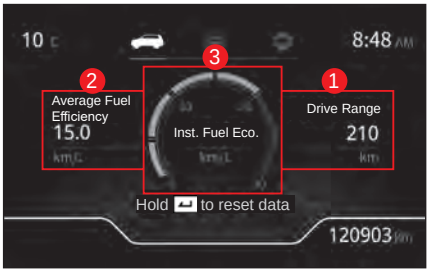
Button and lever	Operation	Function
1 Menu button	Press briefly	• Move to the main menu • Go to upper menu when entering User Settings menu
2 MOVE Moving lever	Raise/lower briefly	• Move to the submenu (mode)
3 Selection button	Press briefly	• Enter the menu • Check/select the setting
	Press and hold down	• Reset the driving information of the vehicle

Main menu list

Main menu	Description
Trip computer information	• Drive Range/AVG. Fuel/Instantaneous fuel economy display • Driving Distance A/AVG. Speed/Driving Time • Driving Distance B/AVG. Speed/Driving Time • After Departure • ISG cumulative time display (AUTO STOP) • Media display • Display the status of the tire pressure monitoring system (TPMS)
Driving assist Menu	• Driver assistance system operation status display • Driver attention alert level display
User settings	• Driving Assist • Door/Tailgate • Light • Convenience • Sound • Dashboard Settings & Info • Reset All Settings

Trip computer information

Distance to empty/average fuel economy/ Instantaneous fuel economy



1 Distance to empty

The distance that the vehicle can travel calculated based on the remaining fuel level, average fuel economy and accumulated driving pattern is displayed.

The display range is between 0 km and 1,500 km and "----" blinks if the distance to empty is less than 50 km.

Caution

- **Actual fuel level remaining in the fuel tank may be different from the fuel level calculated by the trip computer due to factors including the horizontal condition and driving conditions of the vehicle. Use the distance to empty only for reference purpose and refuel before the low fuel level warning light turns on.**

2 Average fuel economy

The average fuel economy calculated using the total amount of fuel used and the mileage since it was reset to “--.--” is displayed.

It indicates the distance (km) traveled using 1liter of fuel, and the value on the screen is updated every 10 seconds.

The average fuel efficiency is calculated continuously as long as the engine is running even if the vehicle is not actually driven.

3 Instantaneous fuel economy

The instantaneous fuel economy is calculated based on the mileage and the amount of fuel consumption.

The display range is between 0 and 30 km/l.

Resetting the average fuel economy

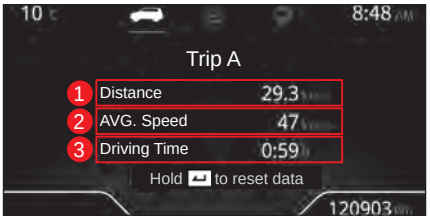
Press and hold down the (select) button in the current mode.

The average fuel economy is reseted and “--.--” is displayed, and when the vehicle is driven for a certaindistance, the average fuel economy is displayed.

Notice

- **You can set the fuel economy to reset according to the vehicle condition (when starting the engine, when refueling).**
  You can set Average fuel consumption auto reset at Dashboard Settings & Info → Fuel Economy Reset → Reset After Refueling or Reset After Ignition under (User Settings) in the instrument cluster.

Mileage/average speed/driving time



1 Mileage (A/B)

The distance that the vehicle traveled (km), average speed (km/h) and driving time (hh:mm) are displayed.

The distance to be displayed ranges between 0.0 km and 9999.9 km.

When the distance exceeds 9999.9 km, it returns to 0.0 km.

2 Average speed (A/B)

The average speed calculated based on the time and distance and it is updated every 10 seconds.

3 Driving time (A/B)

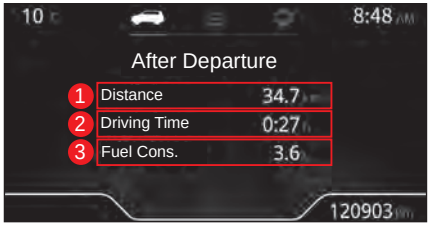
The time to be displayed ranges between 0:00 and 99:59, and when the time exceeds this range, it returns to 0:00.

Resetting the mileage/average speed/driving time

Press and hold down the (select) button in the current mode.

The average speed is reseted to “---” and the driving time is reseted to “0:00”.

Driving information after departure



Distance driven (km) after the start-up, driving time (HH:MM) and fuel consumption (L) are displayed.

1 After departure

Total accumulated distance traveled after the engine is started is displayed.

The distance to be displayed ranges between 0.0 km and 9999.9 km.

2 Driving time

The time to be displayed ranges between 0:00 and 99:59, and when the time exceeds this range, it returns to 0:00.

3 Fuel consumption

The total amount of fuel used after the engine is started is displayed in liters (L).

Reset of departure time / driving time / fuel consumption

The information resets automatically when you turn off the engine and start the engine again.

ISG cumulative time

1 ISG cumulative time

Displays the cumulative ISG OFF time (engine stop) by the ISG system after startup.

Reset of ISG cumulative time

Press and hold the (select) switch in current mode.

The ISG cumulative time is reset as “00:00:00”.

Media Display

The audio (AV) screen is displayed in conjunction with the audio (AV) system.

The image that appears in the upper main menu depends on the mode or function you are currently using.

TPMS status

A message indicating the status of tire pressure is displayed.

- If the tire pressure is normal, “Tire pressure OK” is displayed.
- If the tire pressure is abnormal, the corresponding message according to the degree of abnormal tire pressure is displayed, and this message stays on or blinks depending on the tire pressure condition.

☞ Refer to “Tire pressure monitoring system (TPMS)*” (p.2-29)

Notice

- **Approximately 15 seconds after entering the tire pressure mode, it will automatically switch to “Distance to empty / Average fuel economy / Instant fuel economy” mode.**

Driving assist Menu

Driving assist

When detecting the lanes according to the vehicle condition, the detected lane is displayed in white and alarm can be issued at the detected lane.

Depending on the operating system, the front vehicle is displayed.

The following are the systems that can display the front vehicle in the driving assistance menu:

- Lane Departure Warning (LDW)
- Lane Keeping Assist (LKA)
- Centering Lane Keeping Assist (CLKA)
- LKA hands-off display
- Auto cruise
- Adaptive cruise control (ACC)
- Intelligent Adaptive cruise control (iACC)

Driver attention alert

The driver’s “Cautious driving level” is displayed in 5 steps and the driver can determine the his/her own current cautious driving level.

The “Cautious driving level” is lowered to a poor level according to the driver’s travel pattern analysis and when driving for a long period of time without rest.

User settings

※ The menu configuration may vary according to the instrument panel specifications.

Setting menu	Level 1	Level 2	Level 3
Driving Assist	Front Safety Aid	Autonomous Emergency Braking (AEB) ☑	Tick/Not tick (AEBS OFF warning lamp lights on when unticked)
		Forward Collision Sensitivity	Slow ◧ Medium ■ Fast ◧
		Speed Limit Warning ☑	Tick/Not tick
		LDW & LKA Setting	Lane Departure Warning (LDW) ◧ Lane Keeping Assist (LKA) ■ Emergency Lane Keeping (ELK) ☑
		Adaptive Cruise Level	COMPORT ◧ NORMAL ■ DYNAMIC ◧
		Intelligent Adaptive Cruise ☑	Tick/Not tick
		Front Vehicle Start Warning (FVSW) ☑	Tick/Not tick
		Driver Attention Warning (DAW) ☐	Tick/Not tick
		Safety Distance Warning (SDW) ☐	Tick/Not tick
		HELP	-

Setting menu	Level 1	Level 2	Level 3
Driving Assist	Rear Side Safety Aid	Rear Side Warning and Collision Assist	OFF Collision Warning Collision Assist
		Rear Cross Traffic Warning & Collision Assist	OFF Collision Warning Collision Assist
		Safety Exit Warning (SEW)	OFF ON
		HELP	

Setting menu	Level 1	Level 2	Level 3
Door/Tailgate	Auto Lock	Off	
		Driving	
		Shifting to R,N,D	
	Auto Unlock	Off	
		Engine Off	
		Shifting to P	
	Auto Lock Speed Setting	10km/h	
		20km/h	
		30km/h	
		40km/h	
		50km/h	
	Lock/Unlock Sound ☑	Tick/Not tick	
	Press key twice to unlock ☑	Tick/Not tick	
	Smart Door Auto Lock ☑	Tick/Not tick	
	Power Tailgate ☐	Tick/Not tick	
	Smart Tailgate ☐	Tick/Not tick	
	HELP	-	

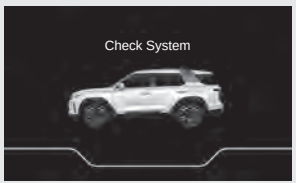
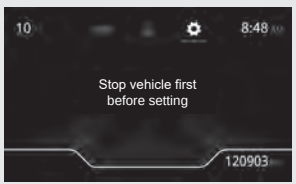
Setting menu	Level 1	Level 2	Level 3
Light	Leaving-Home Headlamp	Deactivate 10 sec.	
	Coming-Home Headlamp	20 sec. 30 sec.	
	HELP	-	
Convenience	Steering Wheel Alignment Alert ☑	Tick/Not tick	
	Wiper Mode Display ☑	Tick/Not tick	
	Light Mode Display ☑	Tick/Not tick	
	Approach Welcome ☐	Tick/Not tick	
	Auto Approach Welcome ☐	Tick/Not tick	
	Long-Term Parking ☐	Tick/Not tick	
	Wireless Charging System ☐	Tick/Not tick	
	HELP	-	
Sound	Welcome & Goodbye Sound ☑	Tick/Not tick	
	HELP	-	

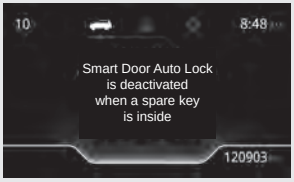
※ Some of the following menus may not be supported depending on the instrument cluster specifications.

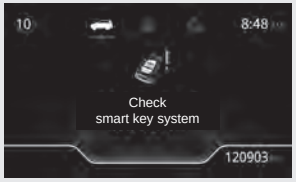
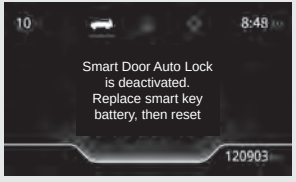
Setting menu	Level 1	Level 2	Level 3
Dashboard Settings & Info	Fuel Economy Reset	OFF ■ Reset After Refueling ◧ Reset After Ignition ◧	
	Fuel Economy Unit	km/L ■ L/100km ◧	
	Temperature Unit	ºC ■ ºF ◧	
	Tire Pressure Unit	psi ■ kPa ◧ bar ◧ kgf/cm² ◧	
	HELP	-	
Reset All Settings	Yes/No	-	-

Message on the display of the instrument cluster

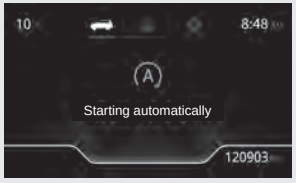
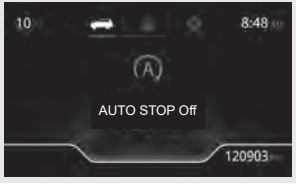
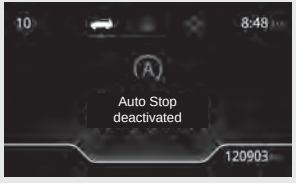
The images in the below messages are based on the standard instrument cluster for visibility and depend on the instrument panel specifications.

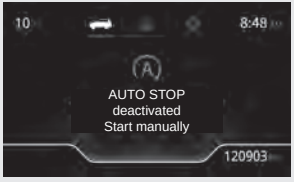
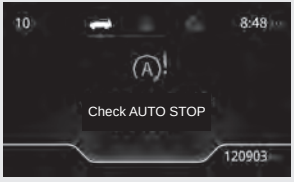
Item	Message	Activation conditions
Welcome message and sound		• If you tick the box at Sound → Welcome & Goodbye Sound display under (User Settings) in the instrument cluster, this message is displayed for 4 seconds when the theft deterrent mode is deactivated and the driver door is open and closed. • When you change the START/STOP switch to the ON status while the message is being displayed, the message disappears but the sound is played to the end.
Check System		• This message is displayed once for 4 seconds when the START/STOP switch is in the ON status. • If the message persists, visit a nearby KG Mobility Authorized Service Center.
Instrument cluster settings		• If a vehicle speed is detected when you enter the User Settings menu and carry out the detailed setting, the relevant warning message is displayed for approximately 5 seconds. • However, the instrument cluster illumination, driving assist and vehicle warning menu are excluded.
ICE warning light		• The ICE warning pop-up is displayed as a pop-up message for 5 seconds when the ambient temperature falls 3°C or below. • The ICE warning pop-up is only displayed once for the first time when turning ignition switch to “IGN ON”. If there is no temperature change (temperature condition for deactivation), the pop-up is not displayed again. • ICE warning symbol is turned off when the ambient temperature is 5°C or higher.

Item	Message	Activation conditions
Vehicle warning log		• You can see the vehicle warning messages from (User Settings) on the instrument cluster. – When the warning message is available at the vehicle, the custom symbol is changed to the master symbol. – When the warning message is not available, the corresponding item is not displayed.
Smart key warning		• When you about to close the door with another authenticated smart key or door handle switch while all the doors are closed and the authenticated smart key is inside the vehicle, this message will be displayed for 5 seconds.
		• If two or more authenticated smart keys are in the vehicle when a door is opened (excluding the engine hood and tailgate) after the engine is turned off, this message is displayed for approximately 5 seconds.
		• If no smart key is in the vehicle with the START/STOP switch in the ON status or when the engine is running, this message is displayed.

Item	Message	Activation conditions
Smart key warning		• If no authenticated smart key is detected when the START/STOP switch is pressed, this message is displayed for approximately 5 seconds.
		• If the vehicle power control from the smart key module or the START/STOP switch is abnormal or an incorrect signal or no signal is received after the smart key is authenticated, this message is displayed for approximately 5 seconds. • If the message persists, visit a nearby KG Mobility Authorized Service Center.
		• If the battery level of the smart key is low with the auto lock function disabled, this message is displayed for approximately 5 seconds.
		• If the battery level of the smart key is low with the auto lock function enabled, this message is displayed for approximately 5 seconds. • If you attempt to set the auto lock function using the smart key when the battery level of the smart key is low, this message is displayed for approximately 5 seconds. • If the message is displayed, the auto lock is disabled. After replacing the smart key battery, tick the box at **Door / Tailgate** → **Smart door auto lock** under (user settings) in the instrument cluster.

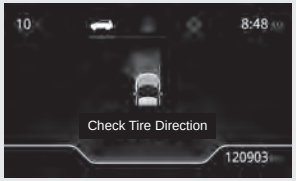
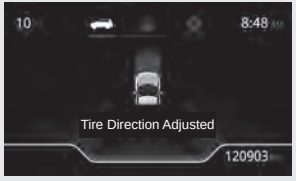
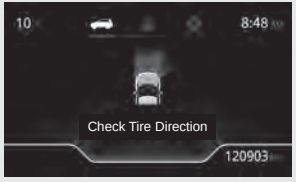
Item	Message	Activation conditions
START/STOP switch warning		• For the vehicles with A/T, when the ignition switch is turned to ACC position a second time by pressing the ignition switch continuously without depressing the brake pedal, this message is displayed for about 5 seconds. • This message informs the driver that the engine can be started only if the START/STOP switch is pressed with the brake depressed.
		• This message is displayed for approximately 5 seconds when you start the engine with the gear shift lever not in the P (parking) or the N (neutral) position. • This message informs the driver that the START/STOP switch should be pressed after the gear shift lever is placed in the P (parking) or the N (neutral) position.
		• This message is displayed for approximately 5 seconds when you attempt to start the engine with the gear shift lever not in the P (parking) position. • This message informs the driver that the engine can be turned off only when the START/STOP switch is pressed with the gear shift lever in the P (parking) position.
		• This message is displayed for approximately 5 seconds in order to prevent the vehicle battery from being depleted when the START/STOP switch in the ACC status is maintained for 12 minutes or more or the driver seat door is opened with the START/STOP switch in the ACC status.

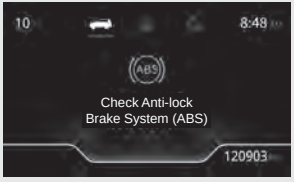
Item	Message	Activation conditions
ISG System		• The message indicating the cumulative time that the engine has stopped is displayed while the ISG system is normally operating.
		• This message is displayed when the engine stops and then is automatically restarted while the ISG system is normally operating.
		• When you press the ISG OFF button, the ISG system stops operating and the system OFF message is displayed for about 5 seconds. However, the indicator on the ISG OFF button will light even if the corresponding message is not displayed according to the pop-up priority.
		• If the current status of the vehicle does not meet the ISG system operating conditions, this message is displayed.

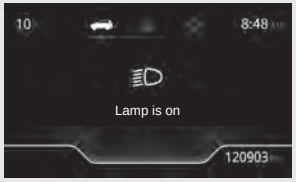
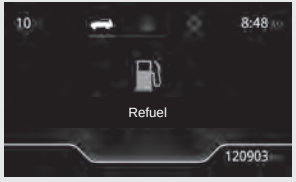
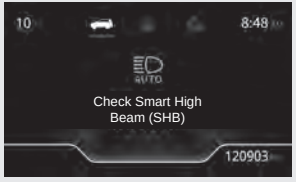
Item	Message	Activation conditions
ISG System		• The message is displayed when the engine stops and is not automatically restarted depending on the vehicle status while the ISG system is normally operating.
		• This message is displayed in the event of the faulty ISG system. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

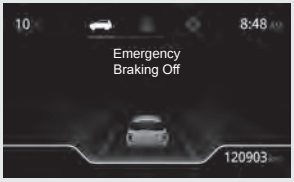
<table>
<tr><th>Item</th><th>Message</th><th>Activation conditions</th></tr>
<tr><td rowspan="2">Front/rear obstacle detection</td><td>If it is in the R (reverse) position
LV3
 
LV2
 
LV1
 
LV0
 
Error
  </td><td>• Rear PAS (Parking Assist System)
(When the gear shift lever is placed in the R (reverse) position with the START/STOP switch in the ON status)
– When you move the gear shift lever to the R (reverse) position, the warning buzzer sounds briefly once, and when an obstacle near the vehicle is detected, the position and distance from the obstacle are displayed in 4 levels (0~3).
– In Level 1 of the rear PAS, the detection result of the front PAS is not displayed, and only the vehicle shape is displayed in Level 0 of the rear PAS.
– When the obstacle detection sensor is abnormal, “?” is displayed for the relevant sensor.</td></tr>
<tr><td>If it is in the D (driving) position
LV3
 
LV2
 
Error
  </td><td>• Front PAS (Parking Assist System)
(When the gear shift lever is placed in the D (drive) position with the START/STOP switch in the ON status)
– When an obstacle is detected in front of the vehicle, the position and distance from the obstacle are displayed in level 3 and level 2, and such position and distance are not displayed in Level 1 and level 0.
– The front parking assist system is not activated when the vehicle speed is 15 km/h or higher.
☞ Refer to “Parking assist system*” (p.4-182)
– When the obstacle detection sensor is abnormal, “?” is displayed for the relevant sensor.</td></tr>
</table>

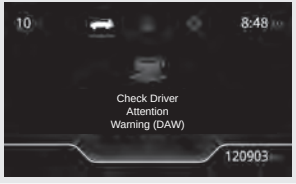
Item	Message	Activation conditions
Display of door/ engine hood/ tailgate opening	Driver door open  Passenger door open  Rear left door open  Rear right door open  Hood open (flashing)  Tailgate open (flashing) 	• Displays which door is open. • When the hood or tailgate is open, the corresponding position flashes. • When all doors are closed, the image of a vehicle with all doors closed is displayed for 1 second.
	Door warning lamp 	• When the door is open, the door ajar warning lamp is displayed on the LCD screen (user setting symbol position). (Main menu symbol changed to door ajar warning lamp)

Item	Message	Activation conditions
Display of tire alignment status	**5 levels on the left**  **0 level**  **5 levels on the right** 	• This message is displayed in level 1 to 5 according to the tire alignment status when the START/STOP switch is switched from the OFF status to the ON status. • This message is not displayed when the tire alignment status is level 0. • The message is displayed for 5 seconds up to level 2 and the message is displayed continuously until the condition is met for level 3 to 5. • This message is displayed only when the gear shift lever is in the P (parking) or the N (neutral) position. • For vehicles with the manual transmission, the message is displayed only when the transmission selector lever is in the neutral position and the parking brake is applied.

Item	Message	Activation conditions
Electronic stability control system (ESC) warning		• If the ESC system is abnormal, the warning light turns on and this message is displayed 3 seconds after the engine is started.
Brake system warning		• If the EBD system is abnormal, the warning light turns on and the message is displayed 3 seconds later after the engine is started.
ABS warning		• If the ABS system is abnormal, the warning light turns on and the message is displayed 3 seconds later after the engine is started.
Engine oil level check		• If the level of engine oil is insufficient or the engine oil pressure is abnormal, the warning light turns on and this message is displayed 3 seconds later after the engine is started.

Item	Message	Activation conditions
Exterior lamp ON alert		• This message is displayed if the exterior lamp is on when the engine is turned off and the driver seat door is opened.
Sunroof open warning		• A message will be displayed if the sunroof is open after the ignition is turned off.
Refuel warning		• If the remaining level of fuel is insufficient, the warning light turns on and this message is displayed 3 seconds later after the engine is started.
Low fuel warning (possible to drive up to 30 km)		• This message is displayed when the distance that can be traveled with current fuel level is approximately 30 km or less.
Smart High Beam (SHB) System Warning		• In the event of a smart high beam (SHB) system failure, this message will be displayed after 3 seconds of engine start.

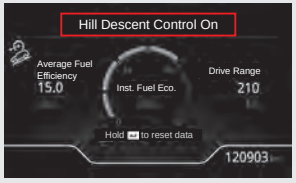
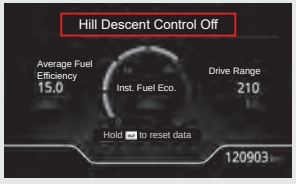
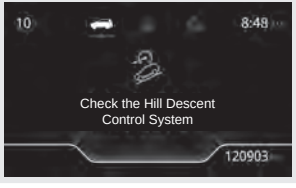
Item	Message	Activation conditions
Autonomous Emergency Braking (AEB)		• When the operating conditions for the autonomous emergency braking system (AEB) are met, a “Collision Alert” message is displayed for 5 seconds. The AEB warning lamp also flashes for 5 seconds. • If the conditions for displaying warning message are met again during the 5 seconds of the message display, the new warning message will be displayed for 5 seconds with the same flashing of the indicator.
		• This message is displayed after the vehicle has stopped by the activation of emergency braking (maximum brake control) by the 3rd warning of AEB.
		• If there is a fault in the AEB 3 seconds after the engine start, this warning message is displayed for 5 seconds.
		• This message is displayed when the front camera module (FCM) cannot detect the lane markings, preceding vehicles, people, etc. because of the dirt or debris on the windshield glass.

Item	Message	Activation conditions
Driver Attention Warning (DAW)		• This message is displayed when the driver untick the box at Driving assistance > Driver attention alert under (User Settings) in the instrument cluster and select main menu (Driving Assistance menu).
		• The driver attention warning (DAW) displays the driver's "cautious driving level" in the 5 bars (5 levels) and if there is no bar at the bottom, the driver will be alerted with a warning message and buzzer. (However, the alarm level will be initialized when the engine is switched off or the driver's seat belt is unfastened and driver's door is open)
		• This message is displayed in the event of the faulty DAW system. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

Driver Attention Warning (DAW)

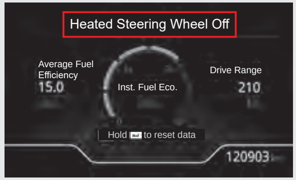
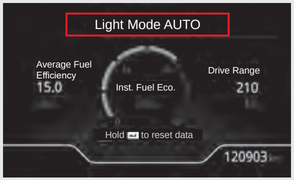
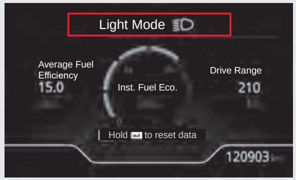
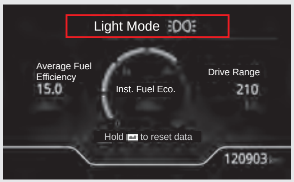
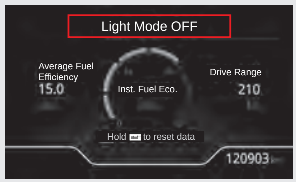
A function that warns and encourages the driver to get some rest by displaying the warning level based on the result of analyzing the vehicle information and the driver's driving pattern.

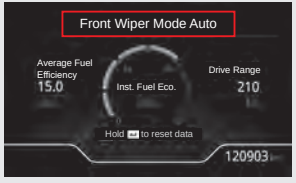
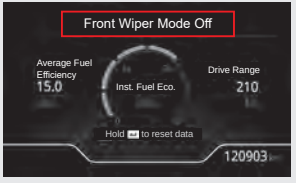
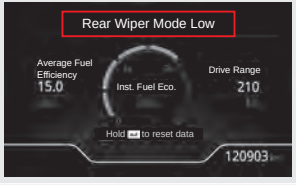
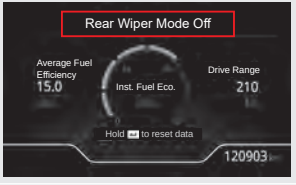
Item	Message	Activation conditions
Break Time Alert		• The message which recommends taking a break is displayed for approximately 10 seconds for your safety after driving for some time. • Alert interval: – Only vehicles without DAW will display the message every 2 hours from the time the engine is first started with the ignition switch ON. – For vehicles with DAW, the warning pop-up is displayed by the DAW system.
Refill washer fluid		• If the washer fluid level is low, the message asking to replenish washer fluid is displayed. This message is displayed each time the ignition switch is switched from OFF to ON.
Bluetooth photo call standby		• When you receive a phone call with the hands-free connected, the caller name or the telephone number is displayed for approximately 5 seconds. If the caller name and the telephone number are incoming at the same time, only the caller name is displayed. • In AV screen (main menu), the pop-up message is not displayed.

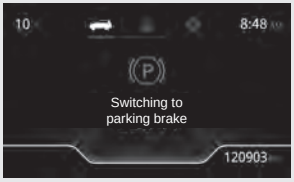
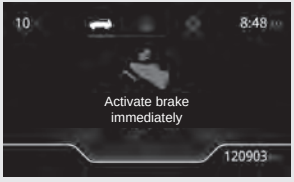
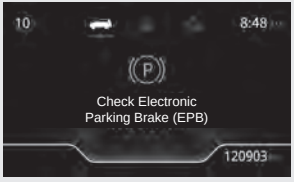
Item	Message	Activation conditions
Hill Descent Control (HDC) function ON/OFF	 	• This message is displayed for approximately 5 seconds according to the Hill Descent Control (HDC) ON/OFF status. • The color of the indicator changes according to the HDC operation status. – Green indicator turns on: The HDC is in ready status. – Green indicator blinks: The HDC is operating. – Red warning light turns on: The HDC system is overheated and abnormal.
HDC System		• If the HDC (Hill Descent Control) system is faulty, this message is displayed. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.
		• If the operating conditions of the HDC system are not met, this message is displayed.

Item	Message	Activation conditions
Cell phone reminder		• If any phone is on the wireless charging pad after the ignition is off (ignition switch in ACC or OFF position) while the wireless phone charger is operating with the ignition switch in ON position, a reminder message “Cell phone is on the wireless charger” is displayed on the instrument cluster. (However, reminder does not work when changing the ignition switch from the OFF position to ACC position even if the wireless phone charger is operating.)
Driving mode (with A/T)	  	• “NORMAL”, “SPORT” and “WINTER” are displayed depending on the operation of the driving mode switch touch during driving.

Item	Message	Activation conditions
Steer mode (M/T)	  	• “NORMAL” and “SPORT” are displayed depending on the operation of the driving mode switch touch during driving.

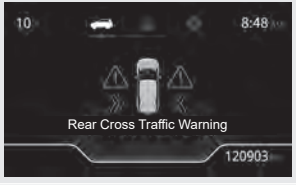
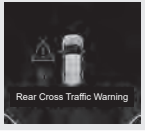
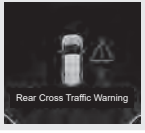
Item	Message	Activation conditions
Steering wheel heater	 	• The message is displayed for 5 seconds according to the steering wheel heater ON/OFF status with the START/STOP switch in the ON status or with the engine started.
Light mode	   	• The current status among 4 modes is displayed for approximately 5 seconds according to the position of the light switch.

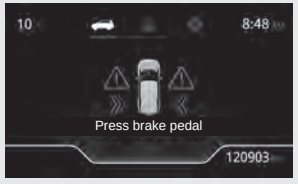
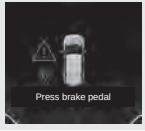
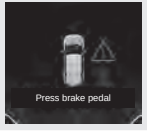
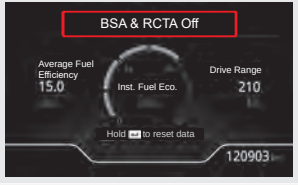
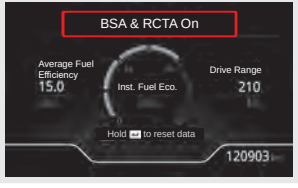
Item	Message	Activation conditions
Windshield wiper mode	   	• The current status of the windshield wiper among 4 modes is displayed for approximately 5 seconds according to the position of the wiper operation lever.
Rear window wiper mode	  	• The current status of the rear window wiper among 3 modes is displayed for approximately 5 seconds according to the position of the rear window wiper operation lever.

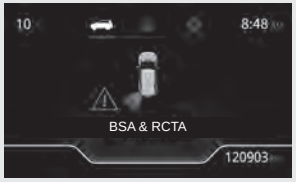
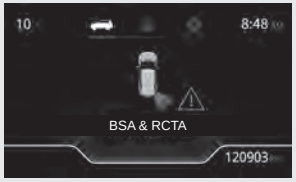
Item	Message	Activation conditions
EPB (Electric Parking Brake)		• This message is displayed when you press the accelerator pedal with the condition for automatic release not met while the Electronic Parking Brake (EPB) is applied or the AUTO HOLD function is activated.
		• This message is displayed when the AUTO HOLD operation status is changed to the Electronic Parking Brake (EPB) status.
		• This message is displayed for approximately 5 seconds when the occurrence of vehicle slip or EPB failure is detected with AUTO HOLD activated. However, this message is not displayed if the Electronic Parking Brake (EPB) activated again automatically when a vehicle slip occurs, preventing the occurrence of vehicle slip.
		• When the Electronic Parking Brake (EPB) system is abnormal, this message is displayed and the relevant warning light blinks. • If the message persists, visit a nearby KG Mobility Authorized Service Center and have your vehicle checked and serviced.

Item	Message	Activation conditions
Auto hold		• If the auto hold function is abnormal, the message is displayed. • If the message persists, visit a nearby KG Mobility Authorized Service Center and have your vehicle checked and serviced.
		• This message is displayed when you operate the EPB switch without depressing the brake pedal for deactivating the AUTO HOLD function.
Electronic Stability Control (ESC) ON/OFF	 	• This message is displayed for approximately 5 seconds depending on the status of the ESC OFF switch.

Item	Message	Activation conditions
Safety Exit Warning (SEW)	  	• If you are about to open the door to leave the vehicle when a vehicle is approaching from the rear side, the vehicle exit alert system displays a message and generates a beep sound. However, it operates only when the gear selector lever is in P (park) or N (neutral) position.

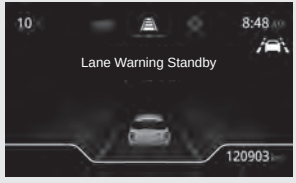
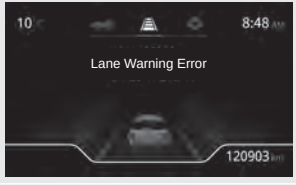
Item	Message	Activation conditions
Blind Spot-Detection Warning (BSW)		• This message is displayed in the event of the faulty BSW system. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.
		• This message is displayed when the BSW system is turned on and the sensor can not normally detect the blind spots: when there are foreign materials on the outside or inside of the rear bumper, a trailer or other equipment is installed in the rear of the vehicle, the width of the road is wide, it snows or rains too much and etc.
Rear Cross Traffic Warning (RCTW)	  	• This message is displayed when a vehicle or object is approaching rear left and/or rear right side of the vehicle during the operation of RCTW system.

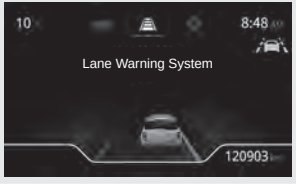
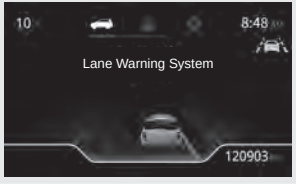
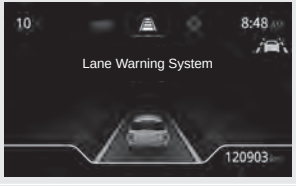
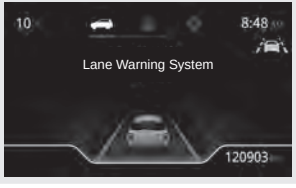
Item	Message	Activation conditions
Rear Cross Traffic Alert Intervention (RCTA)	  	• If, the risk of collision is detected due to an approaching vehicle during operation of the RCTA system, emergency braking (braking assistance) is performed while the corresponding alarm is displayed.
Rear cross traffic alert (RCTA)	 	• The message will be displayed for about 5 seconds depending on the ON / OFF status of the RCTA system.

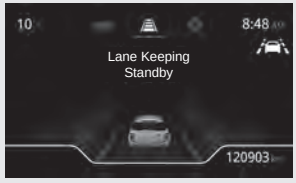
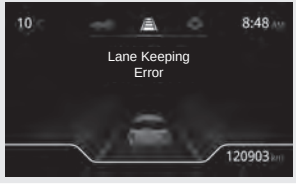
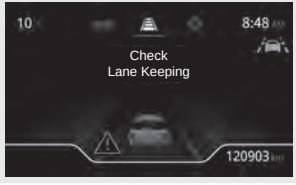
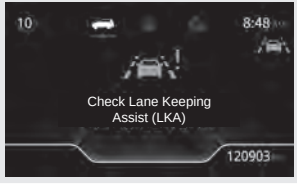
Item	Message	Activation conditions
Blind Spot Collision Assist (BSA)	 	• If the risk of collision is detected due to an approaching vehicle during operation of the BSA system, the steering control is carried out while the corresponding alarm is triggered.
Front Vehicle Start Warning (FVSW)		• This function is enabled when you tick the box at Driving Assist > Front vehicle start warning under (User Settings) in the instrument cluster.
		• If there is a fault in the FVSW system, this message is displayed. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

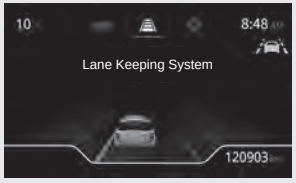
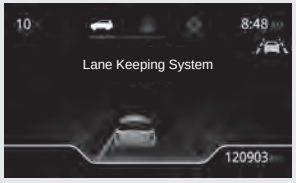
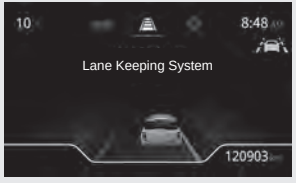
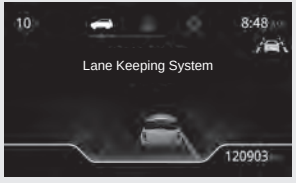
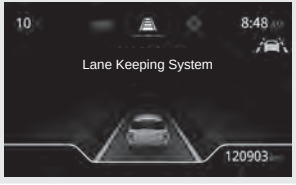
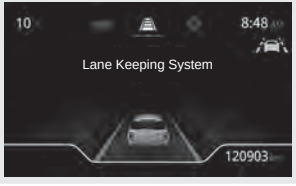
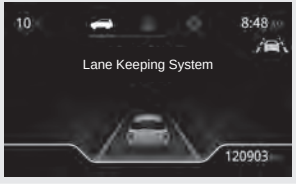
Front Vehicle Start Warning (FVSW)

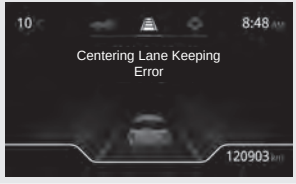
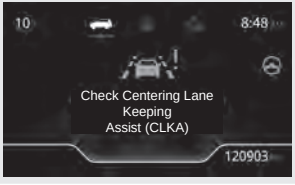
A function to emit a buzzer and display a message if the driver does not depart the vehicle after the front vehicle has departed and moved a certain distance

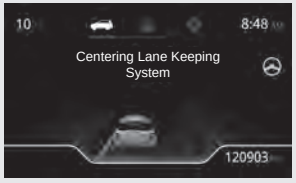
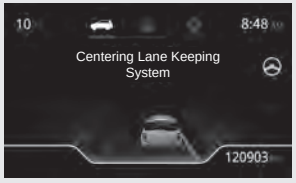
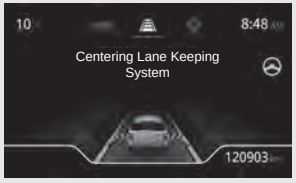
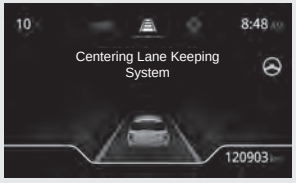
Item	Message		Activation conditions
Lane Departure Warning (LDW)		-	• Displayed when the lane departure warning is disabled.
		-	• The lanes are shaded when the vehicle is driven at a low speed of less than 40km/h or at a high speed of 180 km/h or higher or both lanes are not detected.
		-	• Displayed when the lane departure warning is disabled.
			• This message is always displayed in the event of the faulty LDW. • Displayed as pop-up message 3 seconds after the start-up when there is a fault in the lane departure warning. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

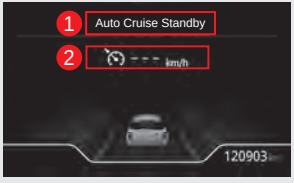
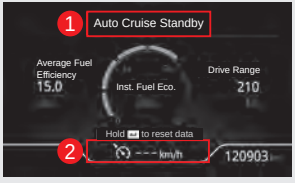
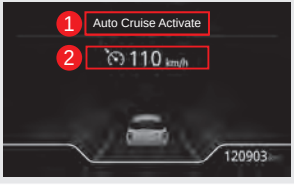
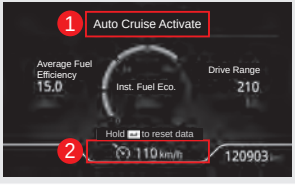
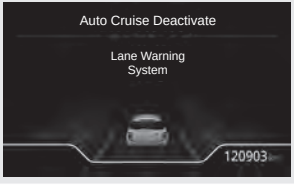
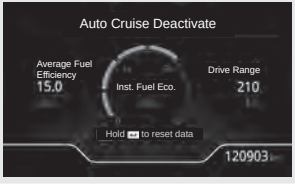
Item	Message		Activation conditions
LDW Lane Display Area			• Even though the left lane is detected only, the detected left lane will be displayed. (Color: blue) • If the driver does not operate the turn signal or turn on the right turn signal and approach the left lane, the lane will blink. (Color: blue ↔ red)
			• If only right lane is detected, the detected right lane will be displayed in green. (Color: blue) • If the driver does not operate the turn signal or turn on the left turn signal and approach the left lane, the lane will blink. (Color: blue ↔ red)
		-	• If both lanes are detected, the detected both lanes will be displayed. (Color: blue)
			• If both lanes are detected and the vehicle approaches the left or right lane without turning on the turn signal, the lane will blink. (Color: blue ↔ red)

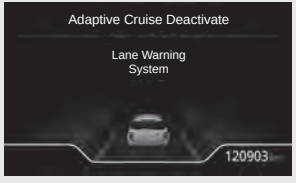
Item	Message		Activation conditions
LKA (Lane Keeping Assistance)		-	• Displayed when the lane keeping assistance system is disabled.
		-	• The lanes are shaded when the vehicle is driven at a low speed of less than 40km/h or at a high speed of 180 km/h or higher or both lanes are not detected.
		-	• Displayed when the lane keeping assistance system is disabled.
			• This message is always displayed in the event of the faulty LKA • Displayed as pop-up message 3 seconds after the start-up when there is a fault in the lane keeping assistance system. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

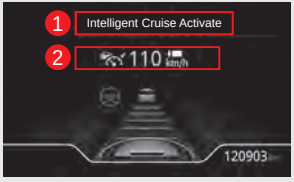
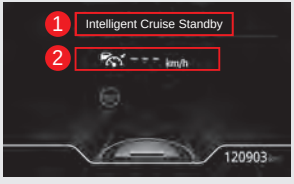
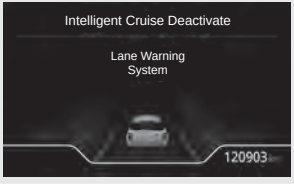
Item	Message		Activation conditions
LKA lane display area			• Even though the left lane is detected only, the detected left lane will be displayed. (Color: blue) • If the driver does not operate the turn signal or turn on the right turn signal and approach the left lane, the lane will blink. (Color: blue ↔ red)
			• Even though the right lane is detected only, the detected right lane will be displayed. (Color: blue) • If the driver does not operate the turn signal or turn on the left turn signal and approach the right lane, the lane will blink. (Color: blue ↔ red)
		-	• If both lanes are detected, the detected both lanes will be displayed. (Color: blue)
			• If both lanes are detected and the vehicle approaches the left or right lane without turning on the turn signal, the lane will blink. (Color: blue ↔ red)

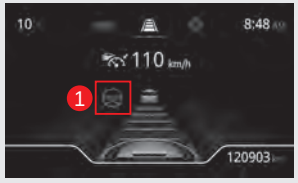
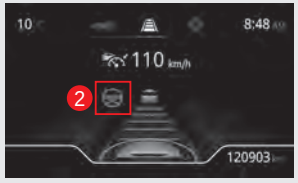
Item	Message		Activation conditions
Centering Lane Keeping Assist (CLKA)		-	• Displayed when the centering lane keeping assist (CLKA) is deactivated.
		-	• The lanes are shaded when the vehicle is driven at a low speed of less than 1km/h or at a high speed of 180 km/h or higher or both lanes are not detected.
		-	• Displayed when the centering lane keeping assist (CLKA) cannot be operated.
			• This message is always displayed in the event of the faulty centering lane keeping assist (CLKA). • Displayed as pop-up message 3 seconds after the start-up when there is a fault in the centering lane keeping assist (CLKA). • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

Item	Message		Activation conditions
Centering lane keeping assist (CLKA) lane display area			• Even though the left lane is detected only, the detected left lane will be displayed in blue. • If the driver does not operate the turn signal or turn on the right turn signal and approach the left lane, the corresponding lane will be flashed between blue and red alternately.
			• Even though the right lane is detected only, the detected right lane will be displayed in blue. • If the driver does not operate the turn signal or turn on the left turn signal and approach the right lane, the corresponding lane will be flashed between blue and red alternately.
		-	• If both lanes are detected, the detected both lanes will be displayed in blue.
			• If both lanes are detected and the vehicle approaches the left or right lane without turning on the turn signal, the corresponding lane will be flashed between blue and red alternately.

Item	Message		Activation conditions
Cruise control (without radar)			• When you press the cruise control ON/OFF switch with the ignition switch turned on, “Auto cruise ready” message (1) and symbol (2) are displayed and the auto cruise becomes ready.
			• When you pull down the speed control lever with the auto cruise ready, “Auto cruise set” message (1), symbol and set speed (2) are ready and auto cruise is activated. • Adjust the vehicle speed by pushing up or pulling down the speed control lever.
			• If you disable the cruise control during its operation (ready/auto), "Auto cruise disabled" message is displayed and the cruise control is deactivated.

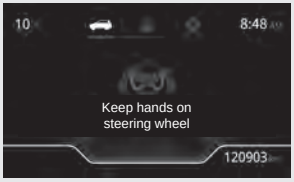
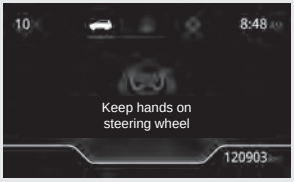
Item	Message		Activation conditions
Adaptive Cruise Control (ACC) (With Radar)		-	• When you pull down the speed control lever with the adaptive cruise ready, “Adaptive cruise set” message (1), symbol and set speed (2) are ready and adaptive cruise is activated. • If there is no vehicle ahead, the driver’s vehicle keeps driving at the set speed. • If there is a vehicle driving at a speed lower than the set speed ahead, the driver’s vehicle will travel while maintaining a set distance to the vehicle ahead.
		-	• During the adaptive cruise control (ACC) operation, when the standby conditions such as the brake pedal are satisfied, the message “Adaptive Cruise Control Ready” (1) and symbol (2) are displayed, and the adaptive cruise control (ACC) enters standby mode. • While the adaptive cruise control (ACC) is in standby mode, pushing up the cruise control speed adjustment lever in the RES+ direction activates the adaptive cruise control (ACC).
		-	• If you disable the adaptive cruise control during its operation (ready/auto), “Adaptive cruise disabled” message is displayed and the adaptive cruise control is deactivated.

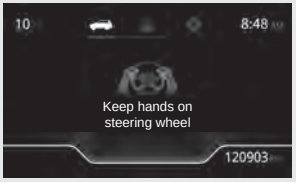
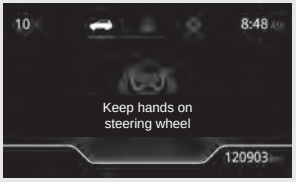
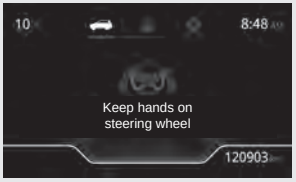
Item	Message		Activation conditions
Intelligent Cruise Control (iACC) (With Radar)		-	• When you pull down the speed control lever with the intelligent cruise ready, “Intelligent cruise set” message (1), symbol and set speed (2) are displayed and intelligent cruise is activated. • If there is no vehicle ahead, the driver’s vehicle keeps driving at the set speed. • If there is a vehicle driving at a speed lower than the set speed ahead, the driver’s vehicle will travel while maintaining a set distance to the vehicle ahead.
		-	• During the intelligent cruise control (IACC) operation, when the standby conditions such as the brake pedal are satisfied, the message “Intelligent Cruise Control Ready” (1) and symbol (2) are dis-played, and the intelligent cruise control (IACC) enters standby mode. • While the intelligent cruise control (IACC) is in standby mode, pushing up the cruise control speed adjustment lever in the RES+ direction activates the intelligent cruise control (IACC).
		-	• If you disable the intelligent cruise control during its operation (ready/ auto), “Intelligent cruise disabled” message is displayed and the intelligent cruise control is deactivated.

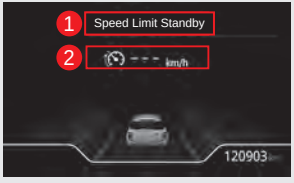
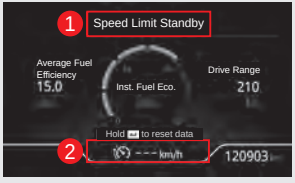
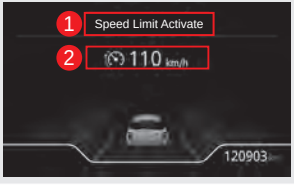
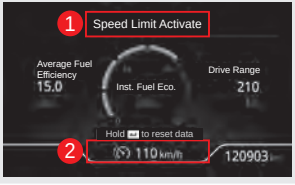
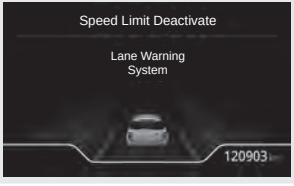
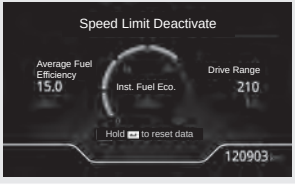
Item	Message		Activation conditions
Intelligent steering assist control		-	• The steering assist symbol is displayed in 3 steps (Ready to set, Set, and Activated) depending on the operating state of the intelligent cruise control. – Step 1 (1) : When the intelligent cruise control is in ready mode in the driver assistance main menu – Step 2 (2) : When the intelligent cruise control is set – Step 3 (3) : When driving while maintaining the center of the lane with the intelligent cruise control set
		-	
		-	

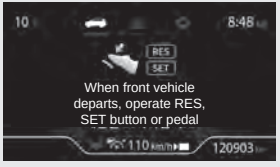
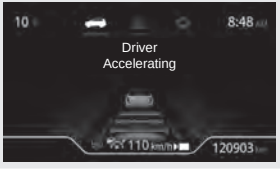
Item	Message	Activation conditions
Intelligent cruise control's distance display (front vehicle not displayed)		• When you press the safety distance set button with the intelligent cruise control activated, the corresponding message is displayed while the setting is shifted by one step as an order of step 5 → step 4 → step 3 → step 2 → step 1 → step 5.

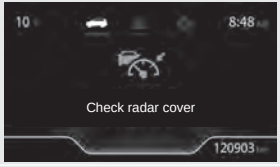
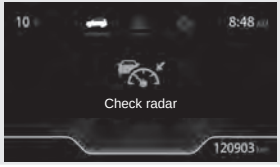
Item	Message		Activation conditions
Intelligent cruise control's distance display (front vehicle displayed)		-	• When you press the safety distance set button with the intelligent cruise control activated, the corresponding message is displayed while the setting is shifted by one step as an order of step 5 → step 4 → step 3 → step 2 → step 1 → step 5. At this time, the front vehicle is also displayed on the message.
		-	
		-	
		-	
		-	

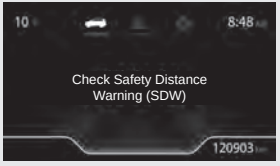
Item	Message	Activation conditions
Lane keeping assistance system hands-off		• If the system determines that the driver does not hold the steering wheel with the lane keeping assistance system activated, a message is displayed as the stage 1 warning.
		• When a certain period of time has elapsed after the stage 1 warning, the message and beep are given continuously as the stage 2 warning.
		• After a period of time since the stage 2 warning message is issued, the message and different beep than 2 stage beep are given as the stage 3 warning.
		• After the stage 3 warning, for safe operation, the LKA is disabled and the relevant message is displayed.

Item	Message	Activation conditions
Intelligent cruise control hands-off		• If the system determines that the driver does not hold the steering wheel with the intelligent cruise control system activated, a message is displayed as the stage 1 warning.
		• When a certain period of time has elapsed after the stage 1 warning, the message and beep are given as the stage 2 warning.
		• After a period of time since the stage 2 warning message is issued, the message and different beep than 2 stage beep are given as the stage 3 warning.
		• After the stage 3 warning, for safe operation, the intelligent cruise control system is disabled and the relevant message is displayed.

Item	Message		Activation conditions
Speed limit			• When you press the speed limit control ON/OFF switch with the ignition switch turned on, “Speed Limit Standby” message (1) and symbol (2) are displayed and the speed limit becomes ready.
			• When you pull down the cruise speed selector lever with the speed limit ready, “Speed Limit Activate” message (1), symbol and set speed (2) are displayed and speed limit is activated. • Adjust the vehicle speed by pushing up or pulling down the speed control lever.
			• If you disable the speed limit during its operation (ready / set), “Speed Limit Deactivate” message is displayed and the speed limit control is deactivated.

Item	Message	Activation conditions
Adaptive Cruise Control Alert Pop-up		• When the front vehicle is no longer detected for example, due to change of lane, during the adaptive cruise control operation, the message is displayed.
		• If the vehicle stops during the adaptive cruise control operation (or along with ISG), after a certain period of time, you will be prompted to step on the accelerator pedal or raise or lower the cruise control switch to start.
		• The message is displayed when the distance between the driver's vehicle and the preceding vehicle is getting smaller with the adaptive cruise control activated.
		• The message is displayed when the driver depresses the accelerator pedal with the adaptive cruise control activated.

Item	Message	Activation conditions
Adaptive Cruise Control Alert Pop-up		• The message is displayed when the adaptive cruise control is automatically deactivated.
		• The message is displayed If the operation conditions do not meet during the adaptive cruise control operation.
		• The message is displayed If the operation conditions do not meet during the adaptive cruise control operation.
Adaptive Cruise Control Check Pop-up		• A message is displayed when the front part of the camera cover is contaminated due to dust, dirt or other materials and can't detect the lane, preceding vehicle or people, etc.
		• This message is displayed in the event of the faulty radar system. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

Item	Message	Activation conditions
Safety distance warning		• This function is enabled when you tick the box at **Driving assist** → **Front safety aid** → **Safety distance** warning under (User Settings) in the instrument cluster. • The message is displayed when your vehicle is approaching the preceding vehicle.
		• The message is displayed if the safety distance reminder system is faulty. • If the message stays on, have the system checked and serviced at a nearest KG Mobility Authorized Service Center.

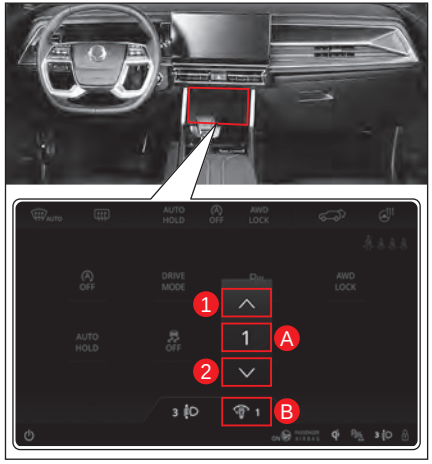
Safety Distance Warning (SDW)

Function to display the message to the driver when it is determined that safety distance is not secured by analyzing the information such as distance to front vehicle, speed and position

To Adjust Instrument Cluster Illumination Brightness

The instrument cluster illumination brightness can be adjusted in 20 steps by lightly touching the instrument cluster illumination control switch (A) with the ignition switch turned on.

At this time, the brightness of the switch light, which is turned on when the tail light is turned on together with the instrument cluster illumination, is also adjusted.



1 To make brighter

2 To make darker

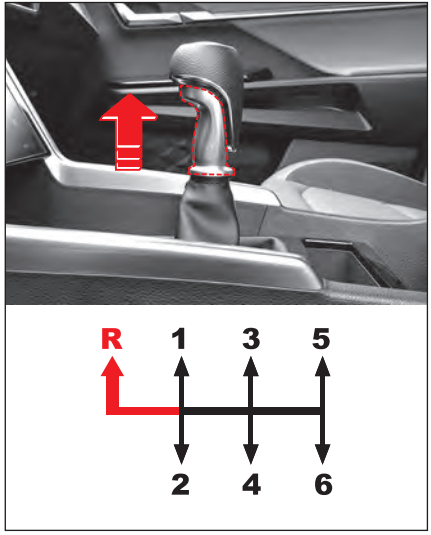
- A short touch of the instrument cluster illumination control switch will brighten or dim the illumination by one level.
- When you touch and hold the instrument cluster illumination control switch, brightness will lighten or darken by 1 step every about 0.2 seconds.

Notice

- **The instrument cluster illumination brightness level is indicated by (A) and (B).**
- **If the ignition switch is cycled off and on, the instrument cluster illumination remains at the previously set brightness.**
- **If you keep pressing switch (1), the level will no longer increase above step 20.**
- **If you keep pressing switch (2), the level will no longer drop in step 1.**

Shift lever in manual transmission

The manual transmission in your vehicle has 6 forward gears and 1 reverse gear. To change gears, fully depress the clutch pedal. Then, move the gearshift lever into a desire gear.
After shifting, release the clutch slowly.



: Move gear shift lever while pulling reverse shift lever up

: Move gear shift lever while pulling reverse shift lever up

Reverse Gear

Position for reverse driving.

You should move the gear shift lever while pulling up the lever for reverse shift on the bottom of it.

1st Gear

Position for driving off and high traction force. Depress the clutch pedal to its travel end and move the shift lever to “1”. Then, slowly release the clutch pedal while gently depressing the accelerator pedal to drive off.

3rd Gear

For low- or mid-speed driving.
When upshifting from 2nd gear to 3rd gear, particular caution should be taken not to inadvertently press the gear shift lever sideways in such a manner that 5th gear is engaged.

5th Gear

Position for high speed driving on a highway.
When downshifting from 5th gear to 4th gear, particular caution should be taken not to inadvertently press the gear shift lever sideways in such a manner that 2nd gear is engaged.

6th Gear

Position for very high speed driving on a highway.

4th Gear

Position for normal and high speed driving

2nd Gear

Position for low speed driving

Notice

- **Your vehicle is equipped with the gear shift point indicator, which can be shown on LCD display. Refer to Chapter 5. Instrument cluster for details.**

Downshifting

When you need to slow down in heavy traffic or while driving up steep hills, downshift the gear to release the load to the engine. Downshifting reduces the chance of stalling and gives better acceleration when you need to increase the vehicle speed again. When the vehicle is driving down steep hills, downshifting provides a safe speed and prolongs the life span of brake system.

Gear position when parking

Always apply the parking brake fully and shut the engine off after parking. Shift the transmission into 1st gear when the vehicle is parked on a level ground or uphill grade, and shift into “R” on a downhill grade.

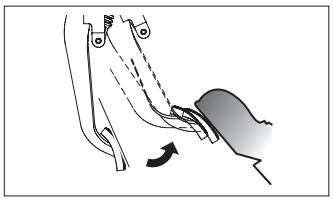
Using the clutch

The clutch pedal should be depressed all the way to its travel end before shifting. The clutch pedal should be fully released while driving. Do not rest your foot on the clutch pedal while driving. This can cause unnecessary wear in clutch system. Do not operate the clutch pedal rapidly and repeatedly.

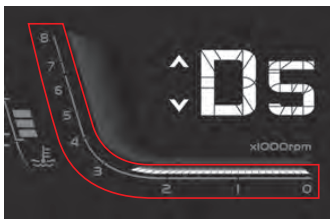
Driving tips for normal starting off or starting off on uphill

1 Depress the clutch pedal and the brake pedal, start the engine and move the shift lever to the 1st gear (reverse gear in reversing) position.

2 If the clutch pedal is released slightly with the brake pedal depressed, the engine rpm increases. (The increase in engine rpm varies depending on the road inclination).



Release the clutch pedal slightly



Increase in engine rpm

3 The vehicle starts to move smoothly if you depress the accelerator pedal while releasing the brake pedal after checking that the engine rpm is raising.

4 Release the clutch pedal completely after the vehicle starts off.

Notice

- **The vehicles equipped with ESP system has HSA (Hill Start Assist) function, which keeps the brake pressure for a certain period of time to prevent the vehicle from slipping on a steep uphill when starting the engine so that you can move your vehicle more safely. HSA system is automatically deactivated after operating for approx. 3 seconds, or the vehicle starts moving with accelerator pedal depressed.**
- **HSA function does not work when you start the vehicle parked on an uphill in reverse gear, or when you start the vehicle parked on downhill in drive gear.**

Caution

- **Because the HSA operation on the brake is automatically cancelled after approx. 3 seconds, you have to release the brake pedal intentionally and depress the accelerator pedal so the vehicle does not slip down the hill.**

EPB operation when driving uphill

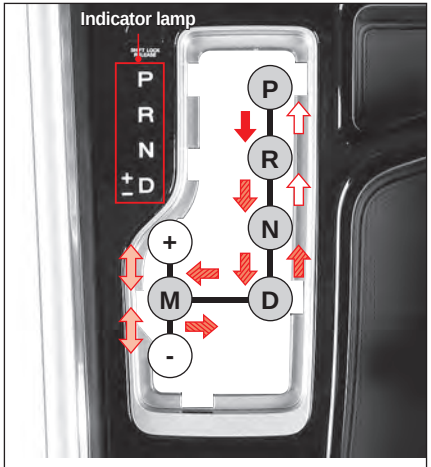
When driving on a steep uphill, it is safer to use EPB as follows:

Apply EPB and then follow the steps (Vehicle with M/T: steps 1 - 3) EPB will automatically release when the accelerator pedal is pressed while the driver's door, hood and trunk are closed and the seat belt is fastened.

Caution

- **To start the engine in manual transmission equipped vehicle, you must fully depress the clutch pedal.**
- **You should stop your vehicle and fully depress the clutch pedal before you shift into the reverse position.**
- **If the clutch pedal is frequently half-depressed, the clutch disc will be easily worn out. Use only as needed.**
- **Do not put your foot on the clutch pedal if not shifting gears.**
- **When shifting from a higher gear into a lower gear, ensure that the RPM gauge pointer does not go into the red zone on the gauge. Especially, when shifting from the 5th to the 4th gear, moving the gear shift lever to the left too much may result in shifting into the 2nd gear. This will cause a sudden increase of the engine speed and may damage the engine and the transmission.**
- **When the temperature of the transmission oil is very low on a cold day, you may have some difficulty for shifting gears. This is a normal phenomenon.**
- **When you have difficulty for shifting into the 1st or reserve gear, put the g ear shift l ever into the neural position and release the clutch pedal. Then, depress the pedal again and shift into the intended gear.**
- **While your vehicle is moving, do not put your hand on the shift lever except to shift gears. Otherwise, the gear may be disengaged from the transmission and the internal transmission components may be damaged.**
- **Do not shift into the second next higher gear from a lower gear. Also, while the engine is rotating fast, do not shift into a lower gear.**
- **When using the half clutch mode, there is no need to abruptly depress the accelerator pedal because the engine power increases. When the accelerator pedal is continuously depressed in half clutch mode, the internal components can be worn or damaged. Frequent use of half clutch mode is not recommended.**

Gear selector lever in automatic transmission*



: movable when IGN ON or engine started, brake pedal depressed and shift lever button pressed

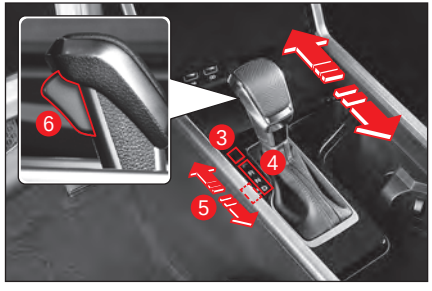
: Movable when shift lever button pressed

: Movable at any time

: Movable at any time (self-return type)

Warning

- **When moving the selector lever (shifting), always make sure that the gear position display of the instrument cluster and the left indicator of the selector lever are displayed and lit correctly.**



1. Paddle shift (-)
2. Paddle shift (+)
3. P and N position lock release button
4. Gear shift lever position (PRND)
5. Manual gear control lever (+/-)
6. Shift lever button

Paddle shift (-/+)

Shift lever in D (drive) position

- The paddle shift can only be operated while traveling at a speed of 10 km/h or higher.
- Each time you pull the paddle shift + (UP) or - (DOWN), the system enters the manual shift mode by going up or down by 1 step.

  If the vehicle speed falls below 10 km/h, move the shift lever from “D” (drive) position to manual mode (+, -) and back to “D” (drive) position while depressing and holding the accelerator pedal for more than 5 seconds. And, the manual shift mode is switched to the automatic shift mode.
- If you move the gear shift lever to the “Manual gear control lever” side, you can use the paddle shift to change the gear position as with the manual transmission.

☞ Refer to “P (parking) position” (p.4-97)

P, N position unlock button

When the gear shift lever is locked in the P (parking) or the N (neutral) position, move the gear shift lever with the Unlock button pressed.

At this time, turn off the engine and move the gear shift lever with the brake pedal depressed.

Gear shift lever position

P: Park / **R**: Reverse / **N**: Neutral / **D**: Drive

When shifting, always make sure that the gear position display of the instrument cluster and the indicator of the selector lever (next to transmission) are lit.

Manual gear shift lever

You can shift the gear by pushing or pulling the manual gear shift lever after moving the gear shift lever from the D (driving) position to the M (manual) position.

Shift Lock

If the driver wants to move the selector lever from the P (park) position to the R (reverse) position, all the following conditions must be met in order to prevent driver's mal-operation and protect the vehicle system:

- Ignition switch and key cylinder ON and engine started
- Brake pedal depressed
- Selector lever button pressed

Caution

- **To move the selector lever from the P (park) position to the other positions, make sure that the ignition switch and key cylinder are turned on, the brake pedal is depressed and the selector lever button is pressed.**
- **If you try to move the selector lever with an excessive force while the selector lever is locked at the P (park) position, it may damage to the selector lever.**
- **Be sure to follow the operating procedure when releasing the shift lock.**

Notice

- **When you depress the brake pedal while the selector lever is in the P (park) position, you may hear an operation sound. This is normal sound due to shift lock and lock release operation.**

Operation procedures for shift lock

1 Depress and hold the brake pedal.

2 Turn the ignition switch to the ON position or start the engine.

3 While pressing the shift lever button, move the shift lever to other positions.

P (parking) position

Select this position for parking the vehicle, starting or warming up the engine, or stopping the vehicle for a long period of time.

Warning

- **Be sure to move the gear shift lever from the P (parking) position to another position while depressing the brake pedal with the START/STOP switch in the ON status. Do not apply excessive force to the gear shift lever when it is fixed to the P (parking) position. Doing to may damage the lever and the transmission.**
- **Never move the gear shift lever to the P (parking) position while driving. Doing so may cause mechanical damage and an accident. Be sure to move the gear shift lever to the P (parking) position after stopping the vehicle completely.**
- **Do not use the P (parking) position instead of the parking brake. Apply the parking brake while parking or stopping.**

R (reverse) position

Select this position for reversing the vehicle.

Be sure to move the gear shift lever from the P (parking) or N (neutral) to the R (reverse) position with the brake pedal depressed after stopping the vehicle completely.

When you place the gear shift lever in the R (reverse) position, the PAS is activated.

Warning

- **Do not place the gear shift lever in the R position while the vehicle is moving forward. Doing so may cause a transmission shock and damage the transmission.**
- **If the gear shift lever is placed in the R (reverse) position, the vehicle moves back slowly even if the accelerator pedal is not depressed. Drive carefully by depressing the brake pedal.**

N (neutral) position

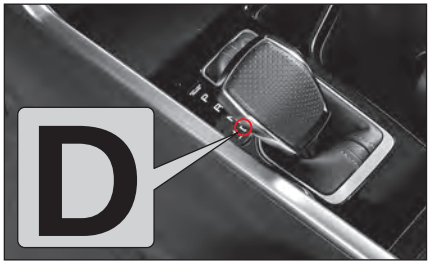
In this position, no power is transferred.

Since the engine power is not transferred to the wheels in the N (neutral) position, so the vehicle does not move on a flat road. However, if you stop the vehicle with the gear shift lever placed in the N (neutral) position, be sure to depress the brake pedal for safety.

Warning

- **Do not apply excessive force to the gear shift lever when it is fixed to the N (neutral) position. Doing to may damage the lever and the transmission.**
- **Do not move the gear shift lever from the D (driving) position to the N (neutral) position or from the N (neutral) position to the D (driving) position while the vehicle is moving.**
- **To stop the vehicle with the gear shift lever in the N (neutral) position on a sloping road, be sure to depress the brake pedal.**
- **Never place the gear shift lever in the N (neutral) position while driving. Doing so may cause the engine brake not to operate, resulting in an accident.**

D (driving) position



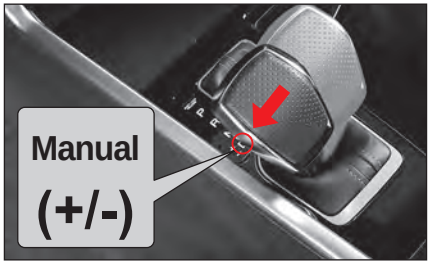
Select this position for driving on a normal road or an expressway.

The gear (1st ~ 6th) is shifted automatically according to the vehicle speed and the depression degree of the accelerator pedal.

Warning

- **When the gear shift lever is placed in the D (driving) position, the vehicle moves forward slowly even if the accelerator pedal is not depressed, so drive the vehicle carefully.**
- **Move the gear shift lever to the D (driving) position after the vehicle has stopped completely. Failure to do so may damage the transmission.**
- **You can move the gear shift lever from the N (neutral) position to the D (driving) position without depressing the brake pedal. However, move the gear shift lever with the brake pedal depressed for safety.**
- **Do not drive or accelerate the vehicle suddenly after moving the gear shift lever to the D (driving) position. In particular, when you drive the vehicle after stopping or parking the vehicle on a sloping road, move the gear shift lever to the D (driving) position with the brake pedal depressed, wait for a couple of seconds until the power is transferred in the transmission and drive the vehicle slowly.**
- **Even if the gear shift lever is placed in the D (driving) position, the vehicle may roll down on a sloping road, so be sure to depress the brake pedal.**

+/-(manual) position



When you moves the gear shift lever from D (drive) position to +/- (manual) position, the driver can change the gear position (1st to 6th) manually like the manual transmission.

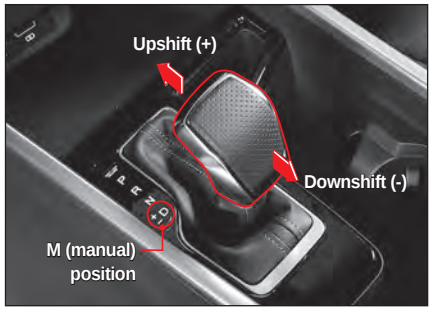
Warning

- **Be careful not to move the gear shift lever inadvertently to the +/- (manual) position while driving. Since the gear position to be shifted is adjusted, this will cause unstable driving situations and can end with an unexpected accident. Especially, be careful when driving in winter.**

Caution

- **Upshifting should be carried out properly in accordance with the road and driving conditions. Be careful to keep the engine RPM below the red zone in the tachometer.**

Shifting

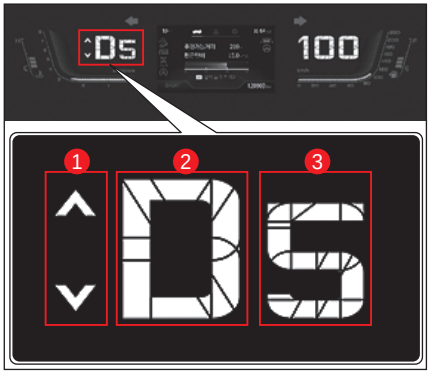


- When the gear shift lever is in +/- (manual) position, the driver can change the gear position by pushing or pulling the shift lever.
- You can shift gear by pulling the paddle shifts fitted to the rear left and right sides of the steering wheel while the paddle shift lever is in the gear shift lever +/- (manual) position.
  - Left (-): Downshift
  - Right (+): Upshift

Notice

- **When you move the gear shift lever to the +/- (manual) position while stopping, you can downshift the gear, and you can start driving the vehicle at the 2nd gear position on a snowy road or a wet road. (WINTER mode function)**
- **Sometimes, the gear cannot be shifted when you operate + (upshift) according to the vehicle speed for securing the driving performance. Also, the gear may not be shifted for preventing excessive engine RPM even if you downshift according to the vehicle speed.**
- **You can adjust the gear position by using the paddle shift switch while the gear shift lever is in D (drive) position but the gear position is changed automatically according to the vehicle condition after a certain period of time.**

Display of gear shift lever position on the instrument cluster



1. Manual gear-shift point indicator
2. Shift lever position
3. Current gear position

Warning

- Do not downshift (3rd, 2nd, 1st) suddenly while driving the vehicle at a high speed. Doing so may damage the vehicle significantly. The vehicle also may slip, resulting in an accident. (especially when driving on a slippery road)

Caution

- Operate the manual gear shift lever once at a time. If you press and hold down the lever, the gear may be shifted to a number of gear positions consecutively.
- Caution should be taken that if you depress the accelerator pedal fully while driving at the 1st, 2nd, 3rd, 4th, 5th or 6th gear position, the gear may be shifted to a higher gear position.
- If you downshift excessively by operating the manual gear shift lever, the gear may not be shifted for protecting the vehicle system.
- Do not speed up forcibly with the gear shift lever in a lower gear position. Doing so may damage the automatic transmission.

Notice

- The gear shift point indicator lights up while the shift lever is in +/- (manual) position.
- If the gear shift point indicator (1) is displayed during driving with the 3rd gear, it indicates the time to shift to the 4th gear (target) for the best driving.

Using the engine brake

To use the engine brake, downshift the gear by one gear position at a time using the manual gear shift lever from the M (manual) position.

Warning

- **Avoid using the engine brake suddenly. Doing so may lead to unstable driving. In particular, avoid using the engine brake suddenly while driving on a snowy road or an icy road.**

Caution

- **Operate the manual gear shift lever once at a time. If you press and hold down the lever, the gear may be shifted to a number of gear positions consecutively.**
- **When using the engine brake, the gear may be shifted differently depending on the driving condition of the vehicle and you may feel a strong shifting shock.**

If the gear shift lever cannot be moved from the P (parking) position to another position

Although you has operated the gear shift lever according to the shift lock release operation sequence, if it does not move from the P (park) position to the other positions, move it manually as follows:

1. Turn off the engine and apply the parking brake.
2. Depress the brake pedal and press the shift lock release button with your finger to move it to the N (neutral) position. (Press the knob button when moving the shift lever.)
3. In the N (neutral) position, depress the brake pedal and start the engine.
4. Move the gear shift lever to the D (driving) position.
5. Release the parking brake, take your foot off the brake pedal and drive the vehicle.

Caution

- **If the gear shift lever cannot be moved from the P (parking) position to another position, be sure to have your vehicle serviced at a KG Mobility Authorized Service Center.**

Driving a vehicle equipped with automatic transmission

Place the gear shift lever in the P (parking) position and start the engine with the brake pedal depressed.

1 Ensure that the engine RPM is in normal range and place the gear shift lever in the D (driving) or the R (reverse) position with the brake pedal depressed.

2 Release the parking brake, take your foot off the brake pedal and drive the vehicle slowly.

Warning

- **Do not depress the accelerator pedal when starting the engine. Doing so may make the vehicle move suddenly, causing an accident.**
- **The engine can also be started after the gear shift lever is placed in the N (neutral) position. However, start the engine after placing it in the P (parking) position for safety.**
- **Do not drive or accelerate the vehicle suddenly after moving the gear shift lever from the P (parking) position to the D (driving) or the R (reverse) position.**

  In particular, when you drive the vehicle after stopping on a hillside road, move the gear shift lever to the D (driving) or R (reverse) position with the brake pedal depressed, wait a number of seconds until the power is transferred in the transmission and drive the vehicle slowly.
- **Caution should be taken that the vehicle may roll down when it is parked on a sloping road even if the gear shift lever is placed in the D (driving) or the R (reverse) position.**
- **When moving the gear shift lever while stopping the vehicle, be sure to depress the brake pedal for safety.**
- **Never depress the accelerator pedal when moving the gear shift lever.**
- **Be sure to apply the parking brake and depress the brake pedal when stopping on a sloping road.**
- **On a steep uphill road or downhill road, the vehicle may move in the opposite direction of its moving direction even if the creep phenomenon occurs. Be sure to depress the brake pedal when stopping on an uphill road or a downhill road.**
- **Do not move the gear shift lever to the N (neutral) position while driving. Doing so may cause the engine brake to not be applied, resulting in an accident. The devices inside the transmission also may not be lubricated smoothly, damaging the transmission.**

Notice

- **Take your foot off the brake pedal and drive the vehicle slowly by depressing the accelerator pedal after checking that the vehicle moves slowly (creep phenomenon).**
- **Moving the gear shift lever with the force applied to the driving system of the vehicle due to a slope such as parking or stopping on a hillside road may cause a shock and a noise. This is a mechanical phenomenon that occurs in the P position of the automatic transmission and it is not a system failure.**
- **In order to maintain the engine in its optimal status, the engine control unit learns and memorizes the inspection characteristics of the injector in accordance with various factors of the engine. Slight vibrations and noises may occur within a short period of time when idling in such a process. This is normal operation of the engine system. Do not misunderstand it as a failure.**

What is the creep phenomenon?

The creep phenomenon is the phenomenon that the vehicle moves slowly without the accelerator pedal depressed if the gear shift lever is placed in the D (driver) or the R (reverse) position while the engine is running.

You can move the vehicle or adjust the speed by simply operating the brake pedal in heavy traffic or when driving the vehicle slowly in a narrow area.

What is automatic shift point?

The automatic shift point of the automatic transmission may vary depending on various driving elements including the road condition (flat ground, hillside road), position of gear shift lever, vehicle speed and depression degree of accelerator pedal. This is a normal operation for securing smooth and stable shifting, proper economy and vehicle performance.

Using the engine brake

When driving a long downhill road, use the engine brake and the foot brake at the same time. When you downshift according to the driving condition, the engine brake will operate.

What is the engine brake?

The engine brake is the decelerating force that occurs due to the deceleration of the engine when you take your foot off from the accelerator pedal while driving. Down shifting while driving a downhill road can receive the braking effect without using the foot brake frequently due to the decelerating force that occurs in the engine. The lower the gear, the higher the engine brake effect.

Warning

- **Do not use the foot brake excessively on a downhill road. Doing so may cause the fade or vapor lock phenomenon due to overheating of the brake system, lowering the braking performance.**
- **The engine brake does not operate when the gear shift lever is placed in the N (neutral) position.**
- **Do not apply the engine brake suddenly. Doing so may cause the tires to slip, resulting in an accident.**

Using the kick down function

You can use the kick down function by depressing the accelerator pedal to the end when you need instantaneous accelerating force for passing a vehicle.

What is the kick down function?

The kick down function downshifts the gear by one or two lower gear positions when the accelerator pedal is depressed to the end while driving. It can be used when instantaneous accelerating force is necessary.

Warning

- **Do not use the kick down function on a slippery road or a sharply curved road. If the tires slip, an unexpected accident may occur.**
- **Using the kick down function excessively may adversely affect the durability and fuel economy of the vehicle.**

Safety mode of the automatic transmission

When an electrical or mechanical defect occurs in the automatic transmission, the automatic transmission enters the safety mode in order to prevent the transmission from being damaged while maintaining the minimum driving status.

When the automatic transmission enters the safety mode, any of the following symptoms may occur.

- A significant shock occurs when moving the gear shift lever.
- The driving force is reduced while driving the vehicle at a high speed.
- When the gear shift lever is fixed to the driving position (D, R) and the vehicle speed does not increase even if the accelerator pedal is depressed (the speed is fixed to the medium speed).

Caution

- **If the safety mode symptom appears due to an electrical or a mechanical defect of the automatic transmission, do not drive the vehicle and have your vehicle checked and serviced at a nearby KG Mobility Authorized Service Center.**

Resetting the safety mode when the gear shift lever is fixed to a position

Resetting the safety mode

1. Stop the vehicle and -place the gear shift lever in the P (parking) position.
2. Turn off the engine and wait for 10 seconds or longer.
3. Start the engine.

After resetting the safety mode, you can drive the vehicle normally.

If the fixed gear shift lever phenomenon appears after resetting the safety mode

The following fixed gear shift lever symptom appear after resetting the safety mode.

- The gear shift lever is fixed to the D (driving) position (forward 2nd gear position)
- The gear shift lever is fixed to the R (reverse) position (reverse 2nd gear position)

In such case, have your vehicle checked and serviced at a nearby KG Mobility Authorized Service Center.

Caution

- **If the safety mode symptom persists after resetting the safety mode, do not drive the vehicle forcibly and have your vehicle checked and serviced at a KG Mobility Authorized Service Center immediately.**

Cautions for using a vehicle equipped with automatic transmission

Warning

- Never move the gear shift lever to the P (parking) or the N (neutral) position while driving. Doing so may cause mechanical damage and an accident.
- Starting the vehicle is available when the gear shift lever is placed in the P (parking) or the N (neutral) position. Start the engine with the gear shift lever in the P (parking) position for safety.
- Do not down shift suddenly while driving the vehicle at a high speed. Doing so may damage the vehicle significantly. Doing so also may lead to unstable driving and result in an accident.

Caution

- Do not place the gear shift lever in the R position while the vehicle is moving forward. Doing so may cause a transmission shock and damage the transmission.
- Do not place the gear shift lever in the N (neutral) position when driving on a downhill road or an uphill road. Placing the gear shift lever back in the D (driving) position for driving after placing it in the N (neutral) position may damage the driving system due to a transmission shock.
- The P lock (P position → R position) and the R lock (N position → R position) functions that allow the operation of the gear shift lever only when the brake pedal is depressed for safe driving.
- When you unlock the gear shift with the brake pedal depressed by the P lock and the R lock functions, there may be a normal operating sound of locking and unlocking the gear shift lever.
- When you move the gear shift lever related to the R lock function from the D (driving) position to the P (parking) position rapidly, there may be intermittent trapping in the N (neutral) position. This is a normal phenomenon for safety and the protection of the transmission. However, avoid sudden operation if possible.

What is Electric AWD (All Wheel Drive)?

The electric AWD (All Wheel Drive) is usually operating in 2WD mode.

If the vehicle determines that 4WD is needed because of the differences in slip and cornering between front and rear wheels, road gradient and etc., it is switched to 4WD automatically by the computerized control unit.

This equipment improves the straight-line stability and turning performance of the vehicle and secure the drivability in dangerous situations such as rainy road, snowy road and sandy path, etc., so that the vehicle can maintain stable driving state compared with the 2WD mode.

In some cases, the 4WD LOW mode known as 4WD LOCK can be used to maximize driving force.

What is 4WD?

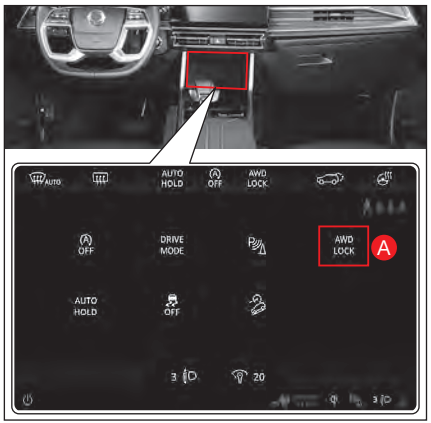
4WD stands for Four Wheel Drive and drives all the wheels to maximize the vehicle's driving force on the unpaved road, rough road, steep hills, sandy or muddy road for enhanced driving performance.

4WD LOCK Shift

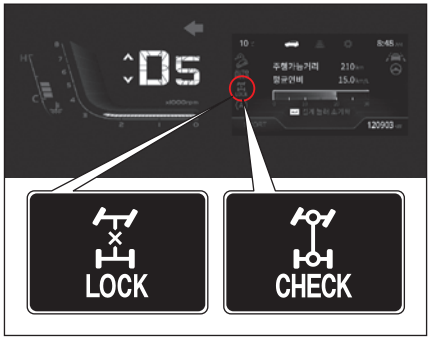
Lightly touch the switch AWD LOCK (4WD LOCK shift) (A). The vehicle will enter 4WD LOCK mode.

- ON: 4WD LOCK indicator lit on instrument cluster / switch shows white symbol
- OFF: 4WD LOCK indicator turned off on instrument cluster / switch shows gray symbol

When the speed of the rear wheel exceeds 40 km/h in 4WD LOCK mode, 4WD LOCK mode is canceled and system returns to 4WD AUTO mode. However, the 4WD LOCK indicator remains turned on / switch remains show white symbol and system will return to 4WD LOCK mode if the speed falls below 40 km/h.



Driving Modes and Indicators



4WD LOCK indicator (green)

When the vehicle enters 4WD LOCK mode, the 4WD LOCK indicator on the instrument cluster lights up. (The switch shows the white symbol.)

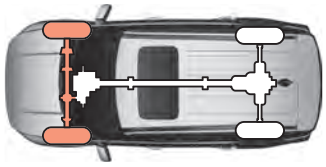
4WD CHECK warning lamp (red)

This warning lamp comes on when the 4WD system is faulty. If the warning lamp is turned on, have the vehicle checked and serviced at a KG Mobility Dealer or KG Mobility Authorized Service Center. Excessive use of the 4WD system may cause the warning lamp to blink. At this time, the 4WD system will not operate normally, but driving is possible. After a certain period of time, the warning lamp will turn off and the 4WD system may return to normal function.

Driving Modes

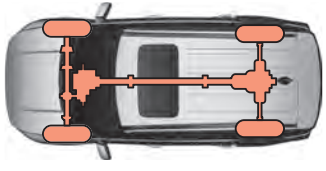
4WD AUTO

2WD



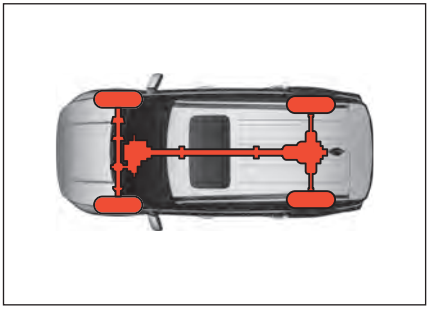
Normal driving condition.

4WD



When the system determines that greater driving force and driving stability is needed, it is switched to 4WD automatically by the computerized control unit.

4WD LOCK



Use in situations where maximum driving force is required such as unpaved road, rough road, steep hills, sandy or muddy road.

Cautions for using 4WD system

Caution

- **Always start the engine prior to operating the 4WD LOCK dial to use 4WD LOCK mode.**
- **Always use 4WD AUTO mode when driving on a public road. Driving on a public road in 4WD LOCK mode (especially when cornering) may damage 4WD system relevant components and may cause noise and vibration to the vehicle.**
- **When you drive the vehicle on a public road in 4WD LOCK mode (especially when cornering at low speed), slight noise and vibration may occur. This is extremely normal and disappears when 4WD LOCK mode is deactivated .**
- **In addition, a slight shock may occur when 4WD LOCK mode is deactivated on an incline. This is a normal phenomenon that occurs when the driving force that was simultaneously acting on the front and rear wheels is released.**
- **If the 4WD CHECK warning lamp (CHECK) lights up, 4WD will be disabled. Have the vehicle checked and repaired immediately by a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Caution

- **For the vehicles with the constant 4WD system, do not allow the vehicle to be towed with the tire on the ground. To prevent damage to the driving-related parts, always lift the towed vehicle wheels on the tow truck or place the dolly under the rear wheel when towing.**
  ☞ **Refer to "When you need to have your vehicle towed" (p.5-21)**
- **In 4WD mode, the vehicle performance depends greatly on the tire condition.**
  - **Check tire wear and tire pressure on a regular basis.**
  - **For vehicles with 4WD system, to prevent damage to the drive system, the tires with same size from the same manufacturer should be used for all 4 wheels. When replacing the tire and wheels, replace all four wheels at the same time.**

ISG (Idle Stop & Go) System*

The ISG (Idle Stop & Go) system stops the engine when the vehicle is stationary and restarts the engine when driving resumes to improve fuel economy and reduce exhaust emissions.

1. ISG ON indicator
2. ISG OFF switch

Caution

- **Some warning lamps may light up momentarily when the engine is started by the ISG system. This is a normal phenomenon due to momentary current consumption.**

Engine Automatic Shutdown

If the vehicle speed is 0 km/h (stationary) and the brake pedal is depressed while the ISG system is operating, the engine will automatically stop.

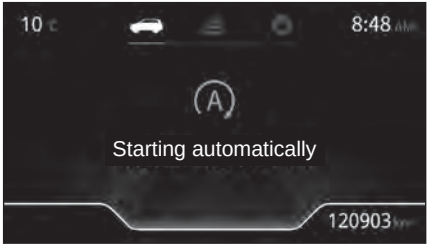
At this time, a message is displayed on the instrument cluster LCD showing the accumulated time of engine shutdown.

Notice

- **The automatic shutdown of the engine by ISG system is maintained for up to 3minutes, and the engine restarts automatically after 3 minutes.**

Automatic Engine Restart

When the engine is automatically stopped, releasing the brake pedal automatically restarts the engine. At this time, the instrument cluster LCD displays a message indicating that the engine has been restarted.



Notice

Engine restarts automatically when:

- **Releasing brake pedal (AUTO HOLD disabled for vehicles with EPB)**
- **Moving shift lever to R or +/- (for manual) position while depressing brake pedal**
- **Applying EPB**

ISG system OFF

1 When you touch the ISG OFF switch (1) lightly, the ISG function stops and the ISG OFF indicator (2) lights up.

2 Lightly touching the ISG OFF switch again resumes normal operation of the ISG system and turns off the ISG OFF indicator on the instrument cluster.

Conditions for ISG system activation

- Driver's seat belt fastened
- Driver's door closed
- Engine hood closed
- With no accelerator pedal depressed
- Idling speed of 1,350 rpm or less
- Coolant temperature between 35°C and 105°C
- Appropriate level of brake negative pressure
- Battery sensor active and meets ISG condition
- Steering wheel 180° or less when stationary
- No certain signal to heater and A/C controller
- Gentle road slope
- Battery temperature between -5°C and 60°C
- Ambient temperature -2°C or higher
- Vehicle stops after moving at least 1 m
- Vehicle stops after reaching vehicle speed over 9 km/h
- No faulty ISG system-related parts
- Shift lever in D (drive) or N (neutral) position

Forced restart conditions

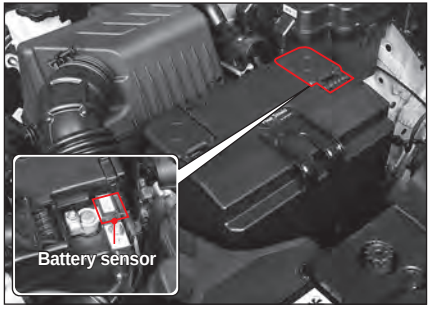
- Press ISG OFF touch switch to stop ISG system
- Engine coolant temperature higher than 110°C
- Heater and A/C controller operating at maximum level
- Defroster in operation
- Poor battery charge level
- Vehicle speed over 2 km/h
- Engine automatic shutdown maximum time (3 min) elapsed
- Faulty components of ISG system and start system
- Release brake pedal and depress accelerator pedal slightly during AUTO HOLD execution
- Driver seat belt unfastened or driver's door open
- Steering wheel angle 180° or greater or steering wheel turned 180 deg/s or higher
- A/C in operation
- Changes in vehicle interior and exterior temperatures within a short period of time
- EPB applied

Battery sensor (BSC)

The batter sensor (BSC) is fitted to the battery negative (-) terminal and monitors the battery information (such as voltage, current, temperature and charge status) and communicates with the EMS to operate the ISG (Idle Stop & Go) system.

When you disconnect the battery sensor connector to repair the vehicle or remove and refit the battery negative (-) terminal, the battery sensor will be deactivated and ISG system may have limited functionality.

If the battery sensor is deactivated, refer to the activation conditions to activate it prior to using the ISG system.



Conditions for activating battery sensor (BSC)

While the electrical equipment in the same condition as factory shipment is connected after re-installing the battery with the ignition switch off, if the vehicle monitors the battery voltage for more than about 3 hours and judges it to be stabilized, the battery sensor will be activated.

Caution

- **If the ISG system does not work after the battery sensor activation conditions are met, have the system checked and serviced at the nearest KG Mobility Authorized Service Center.**

Warning

- **When replacing the battery, always replace with the our genuine ISG system battery (AGM). Otherwise, it may result in serious system failures, battery damage, and explosion due to overcharging, etc.**

Cruise control system

The cruise control system is an auxiliary convenience system that allows the driver to drive the vehicle at a set speed without depressing the accelerator pedal with the flow of traffic where more than a legal safe distance is secured.

The cruise control system is not a safe driving system. Be sure to always drive the vehicle while paying attention to the vehicle speed and surrounding situations.

The cruise control system can be activated when the vehicle is driven at a speed of approximately 40 km/h or greater and less than 180 km/h.

Conditions for using the cruise control

Be sure to use the cruise control only under the following traffic and road conditions.

- Use the cruise control when the current traffic condition is light.
- Use it only on a driveway or an expressway where no change in the vehicle driving condition due to traffic lights, vehicles, pedestrians or other factors is expected.
- Do not use it on a normal road.

Warning

- **Use the cruise control system only on a motorway or an expressway where the road is in good condition.**
- **Stop using the cruise control system in the following road conditions since control may become impossible, causing an accident.**
  - **When a strong wind or a side wind blows**
  - **When there is traffic congestion**
  - **Slippery road, sloping road or continuously curved road**

Cruise control switch and indicator

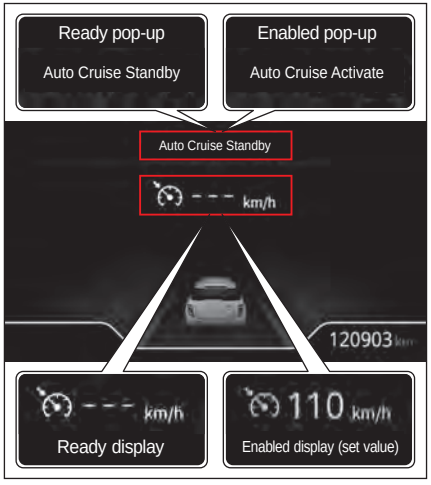
Cruise control switch

1. Cruise control ON/OFF switch
2. Speed selector lever

   RES+
   - Reactivating cruise control
   - Increasing speed

   SET-
   - Set driving speed on cruise control
   - Decreasing speed
3. Speed limit ON/OFF switch
4. Button for setting safe distance

Cruise Control Ready / Enabled Display



Auto cruise READY

The following message is displayed on the instrument panel LCD screen and the system enters auto cruise READY mode when you press the cruise control ON/OFF switch.

- "Auto cruise READY" pop-up displayed
- Symbol and "--- km/h" indicating that system ready to display speed displayed

Auto cruise ENABLED

When the cruise control is in the Ready mode and the speed control lever is lowered, the following message is displayed on the instrument panel LCD screen and the cruise control is enabled.

- "Set Auto Cruise" pop-up displayed
- Symbol and set speed, "100km/h" displayed

The cruise control works when driving at a vehicle speed of about 40 km/h or higher.

Setting the cruise control driving speed

1 Press the cruise control ON/OFF switch.

The instrument cluster shows "Auto cruise is ready".

2 Adjust the vehicle speed so that the speed range for the cruise control operation is between approximately 40 km/h and 190 km/h.

3 Set the desired driving speed by raising or lowering the speed control lever of the cruise control in the SET- direction.

Now, the vehicle is driven at the set speed without depressing the accelerator pedal.

4

Warning

- Activate or deactivate the function after fully familiarizing yourself with the cruise control system. The cruise control operation speed should be set while driving. Operating it improperly or without fully familiarizing yourself with the system may lead to an accident.
- When you activate the cruise control while driving, do not change the gear shift lever to the N (neutral) position. Doing so may damage the relevant system or cause an accident.
- When you drive the vehicle at a fixed speed with the cruise control system activated, be sure to drive safely in order to be able to deal with any situation that can occur on the road and drive the vehicle in a way that you can operate the brake pedal and the accelerator pedal immediately.
- Be sure to always secure safe braking distance, depress the brake pedal if necessary.
- The actual speed for driving up or down a hillside road may be slightly different from the set speed. Avoid using the cruise control system on a hillside road or a sloping road if possible.

  Use the engine brake and the foot brake on a steeply sloping road for driving safely and protecting the vehicle system.

Caution

- When not using the cruise control, press the cruise control ON/OFF switch to turn off the auto cruise READY indicator.

Notice

- To reset the cruise control operation speed, carry out Step No. 2 and No. 3 again with the cruise control activated.
- If the tires of your vehicle are replaced with tires with different size at your disposal, it may cause an error in the set speed. In this case, please contact our service center.
- Refer to the following contents for the detailed operation for each vehicle operation condition.

Speed acceleration process of the cruise control

When the cruise control system is activated

To increase the set vehicle speed while driving with the cruise control activated, push the speed control lever up in the RES+ direction with the accelerator pedal not depressed.

- Pushing the speed control lever up briefly once increases the speed by 1 km/h.
- If you push up the speed control lever for a long time, the speed increases by 1 km/h. The vehicle setting speed increases continuously while the lever is being raised.

When the cruise control system is not activated

The following steps describe how to activate the cruise control system when it is not activated and raise the set vehicle speed.

1. Press the cruise control ON/OFF switch.
   The instrument cluster shows “Auto cruise is ready”.
2. Depress the accelerator pedal until the vehicle speed becomes approximately 40km/h or higher in order to activate the cruise control.
3. When the desired set speed is reached, adjust the speed by pressing the speed control lever in the SET- direction.
   While you are pushing up the speed control lever toward RES+, the vehicle setting speed increases by 1km/h.
4. After setting the speed, take your foot off from the accelerator pedal slowly.

Increasing the set speed by phases with the cruise control activated

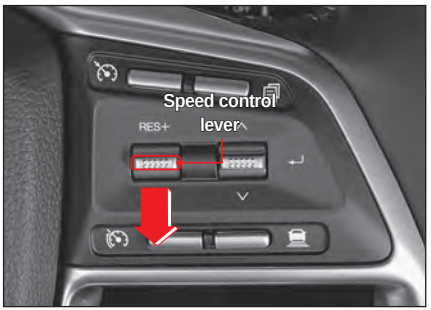
To increase the speed cruise control slightly by phases with the cruise control activated, carry out the following steps.

- Push the speed control lever up briefly in the RES+ direction (within 0.5 second). The set vehicle speed increases by approximately 1 km/h each time you push the speed control lever up.
- For example, if you wish to increase the set vehicle speed by approximately 10 km/h, push the speed control lever up briefly in the RES+ direction 10 times.
- Push up and hold the speed control lever toward RES+ for more than 0.8 seconds. The vehicle setting speed increases by 1 km/h every about 0.8 second while you’re pushing up the lever.

Speed deceleration of the cruise control

When the cruise control system is activated

To decrease the set vehicle speed with the cruise control activated, push the speed control lever down in the SET- direction with the brake pedal not depressed.



- The set vehicle speed decreases by 1 km/h each time you push the speed control lever down briefly.
- Pushing and holding the speed control lever down continuously decreases the set vehicle speed continuously.
  However, when the vehicle speed becomes approximately 40 km/h or less, the cruise control function is deactivated.

Decreasing the set speed by phases with the cruise control activated

To decrease the speed cruise control slightly by phases with the cruise control activated, carry out the following steps.

- Push the speed control lever down in the SET- direction briefly (within 0.5 second). The set vehicle speed decreases by approximately 1 km/h each time you push the speed control lever down.
- For example, if you wish to decrease the set vehicle speed by approximately 10 km/h, push the speed control lever down briefly in the SET- direction 10 times.
- Lower and hold the speed control lever toward SET- for more than 0.8 seconds. The vehicle setting speed decreases by 1 km/h every about 0.8 second while you're lowering the lever.

Deactivating the cruise control

When the following deactivation signal is detected with the cruise control activated, the cruise control system is deactivated (auto cruise is ready).

Deactivation condition

- When the brake pedal is depressed for braking
- When the cruise control ON/OFF switch is operated once (cancel the operation when the switch is operated twice)
- When the gear shift lever is shifted to the N (neutral) position while driving

Other deactivation conditions according to the vehicle condition

- When the Electronic stability control system (ESC) is activated
- When the decelerated speed of the vehicle is approximately 40km/h or less
- When the parking brake is depressed while driving
- Clutch pedal is depressed to shift (M/T only).
- When the cruise control switch is abnormal
- When an abnormal signal from the brake system is detected
- When the engine RPM is approximately 5,700 rpm or higher
- When road shock is severe

If normal conditions for the deactivation of cruise control are not met or an intermittent malfunctions occur, turn off the engine, wait for a little bit and start the engine again. The system is resets so that you can activate the system normally.

Resuming the cruise control

When the cruise control is deactivated due to a cruise control disabled signal (auto cruise ready), the cruise control can be reactivated.

Push up the speed control lever toward RES+ briefly at a vehicle speed of about 40 km/h or higher without depressing the brake pedal.

- The last set speed memorized before the cruise control was deactivated is resumed.
- The AUTO CRUISE indicator on the instrument cluster turns on.

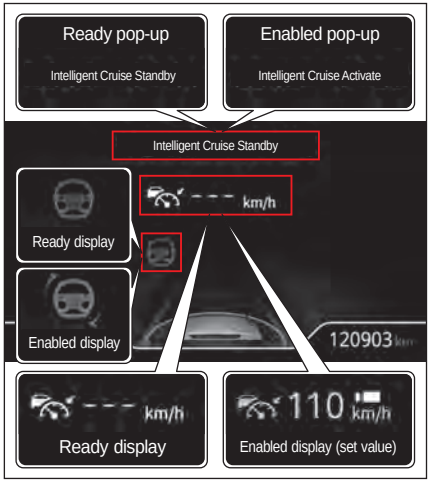
Intelligent cruise control system

This system keeps the vehicle speed constant even if the driver does not depress the accelerator pedal and brake pedal. When a preceding vehicle is detected, it keeps the distance to the preceding vehicle constant at the preset distance. It allows the vehicle to travel in the middle of the lane via steering wheel (steering force) control.

Adaptive cruise control system

This is a convenient device to keep the vehicle speed constant even if the driver does not depress the accelerator pedal and brake pedal. When a preceding vehicle is detected, it keeps the distance to the preceding vehicle constant at the preset distance.

Intelligent Cruise Control Ready / Enabled Display



Set intelligent cruise (enabled)

When the intelligent cruise control is in the Ready mode and the speed control lever is lowered, the following message is displayed on the instrument panel LCD screen and the intelligent cruise control is enabled.

- "Intelligent cruise set" pop-up displayed
- Symbol and set speed displayed

The adaptive cruise control works when driving at a vehicle speed of about 10km/h or higher.

Notice

- **The description in this section is based on the intelligent cruise control. Steering wheel (steering force) control does not work when the adaptive cruise control system is operating.**

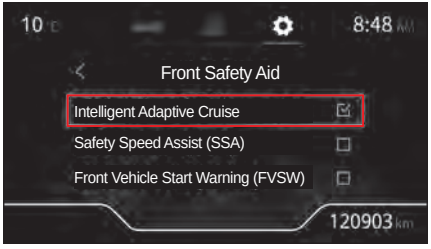
Intelligent Cruise Control Ready

The following message is displayed on the instrument panel LCD screen and the system enters intelligent auto cruise READY mode when you press the cruise control ON/OFF switch.

- "Intelligent cruise READY" pop-up displayed
- Symbol and "--- km/h" indicating that system ready to display speed displayed

To enable intelligent cruise control at instrument cluster

- Go to **Driving Assist Setting → Intelligent Adaptive Cruise Control** under ⚙ (User Settings) in the instrument cluster and tick the box.



To set intelligent cruise control

1. Press the cruise control ON/OFF switch. “Intelligent cruise control READY” message is displayed on the instrument cluster.
2. Adjust the vehicle speed within the operating speed range of the intelligent cruise control.
   - Set speed (30 km/h ~ 180 km/h)
   - Operating speed (0 km/h ~ 180 km/h)
3. Lower the cruise speed selector lever toward SET- or raise toward RES+ to enable the cruise control.
   - “Intelligent cruise control set” message is displayed on the instrument cluster.
   - Then, the vehicle maintains the set speed without depressing the accelerator pedal and keeps driving in the middle of the lane via steering wheel (steering force) control.
   - If a preceding vehicle is detected, the driver’s vehicle will travel while maintaining a set distance to the vehicle ahead.

Caution

- **The vehicle speed may decrease or increase temporarily on uphill or downhill while the intelligent cruise control is operating.**

4

Increasing speed

To increase the set speed during intelligent cruise control operation, push the speed selector lever up toward RES+ without depressing the accelerator pedal.

- Each time you push up the speed selector lever briefly, the speed increases by 1 km/h.
- If you push up the speed control lever for a long time, the speed increases by 10km/h. The vehicle setting speed increases continuously while the lever is being raised. (The set speed increases by a factor of 10.)
- You can set up to 180 km/h.

Caution

- **Since if you push up and hold the lever the vehicle speed increases quickly, be careful of the surrounding situation when operating.**

Decreasing speed

To decrease the set speed during intelligent cruise control operation, push the speed selector lever down toward SET- without depressing the accelerator pedal.

- Each time you push down the speed selector lever briefly, the speed decreases by 1 km/h.
- If you push down and hold the speed selector lever, the speed decreases by 10 km/h. The set speed decreases continuously while the lever is being lowered. (The set speed decreases by a factor of 10.)
- The lowest settable speed is 30 km/h.

Temporary acceleration (override)

Depress the accelerator pedal to accelerate the vehicle temporarily while intelligent cruise control is in operation.

Temporary acceleration is possible by driver's will without affecting the set speed.

In order to return the set speed, release the accelerator pedal. The vehicle will travel at the set speed.

Caution

- **If you depress the accelerator pedal for more than about 60 seconds for temporary acceleration, the intelligent cruise control system will stop operating.**

Deactivating

If any of the following conditions is met while intelligent cruise control is operating, it will be disabled. (intelligent cruise control ready mode)

Disable conditions

- Brake pedal depressed for braking
- Cruise control ON/OFF switch pressed once (pressing twice deactivates system)
- Depressing accelerator pedal for more than 60 sec (override)
- Electric vehicle posture stability control system in operation (e.g., ESC, TCS and ABS)
- Electric vehicle posture stability control system OFF (by ESC OFF switch)
- Shift lever in positions other than D (drive)
- EPB applied
- Driver's door open
- Maximum adaptive cruise control speed (180 km/h) exceeded
- Engine speed below 350 rpm or above 7,000 rpm
- 3rd warning, emergency braking applied by AEB
- HDC system in operation
- Heavily contaminated radar sensor cover

Other disable conditions

- No preceding vehicle at the time of restart after vehicle stop by control
- Distance to front vehicle too far or too close during vehicle stop control
- Vehicle stop control occurs frequently

Notice

- **If "Intelligent cruise control READY" message is displayed on the instrument cluster with the disable conditions met, when you push up the speed selector lever toward RES+ briefly, the intelligent cruise control is reactivated.**
- **To restart the vehicle in which ISG and AUTO HOLD are operating at the same time, you should depress the accelerator pedal.**

If the intelligent cruise control is disabled, check the road situations and driving conditions. In addition, depress the brake pedal to adjust the vehicle speed properly.

Notice

- **The message is displayed if the intelligent cruise control is disabled abnormally.**

Resume

If the intelligent cruise control is disabled (intelligent cruise control ready), you may reactivate it.

Push up the speed control lever toward RES+ briefly at a vehicle speed of about 10km/h or higher without depressing the brake pedal or accelerator pedal.

- The set speed returns to the value before intelligent cruise control was disabled.

Caution

- **When resuming, the vehicle speed can be increased or decreased quickly to the set speed just before it is disabled. Be aware of the surrounding road conditions before resuming.**

If the following message is displayed on the instrument cluster while the vehicle is stationary, push up or lower the speed selector lever briefly toward RES+ or SET-.

Then, the intelligent cruise control resumes.

Depressing the accelerator pedal also resumes the intelligent cruise control.

To Deactivate

In order to deactivate the intelligent cruise control completely, press the cruise control ON/OFF switch twice or press the speed limit switch.

- Intelligent cruise pop-up disappears on the instrument cluster.

When not using the intelligent cruise control, always press the switch to deactivate it.

Caution

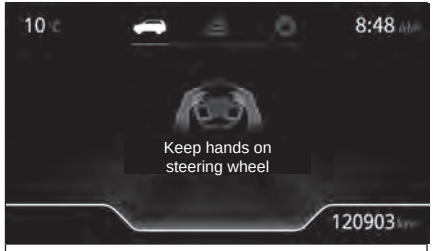
- **If you depress the accelerator pedal for more than about 60 seconds for temporary acceleration, the intelligent cruise control system will stop operating.**

Warning

- **When not using the intelligent cruise control, always turn off the system.**
- **Always set the speed of the intelligent cruise control within the speed range specified by law.**
- **Check the surrounding road conditions prior to using the intelligent cruise control.**
- **Do not use the intelligent cruise control under following circumstances:**
  - **Near high interchange and tollgate**
  - **Where there are a lot of metals around road such as construction site and iron tunnel**
  - **Where lanes and guard rails in close proximity**
  - **Where there is no lane such as parking lot**
  - **Uphill or downhill with steep incline**
  - **Poor visibility due to factors such as fog, heavy rain, heavy snow, etc.**
- **The intelligent cruise control is a convenience feature for the driver. Do not use it as a safety device.**
- **The vehicle control should be determined by the driver at his/her own discretion. Relying on intelligent cruise control only increases the risk of accidents.**

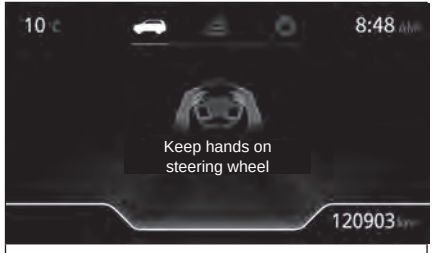
Steering wheel (steering force) control alert

If the driver does not hold the steering wheel while driving during intelligent cruise control's steering wheel control, the hands-off warning will be displayed to the driver in 3 steps and the intelligent cruise control system stops operating.



Step 1: Message

- Warning message is displayed.



Step 2: Message + Beep

- Warning message is displayed and beep sounds.

Step 3: Message + Beep (different from step 2)

- Warning message is displayed, and a beep different from one in step 2 will sound.

Step 3: Message + System disabled

- "Intelligent cruise control disabled" message is displayed and steering control is disabled at the same time. However, the cruise control still functions.

Caution

- If the driver hold the steering wheel so weakly that there is no left or right movement when driving on a straight road, the system may determine that the driver does not hold the steering wheel and may generate a hands-off warning.
- Hands-off warning may be issued late depending on the road conditions. Always hold the steering wheel while driving.

Notice

- For the safe operation of the driver, the IACC (Intelligent Adaptive Cruise Control) will be deactivated when the ignition switch is in the OFF position.
- In order to use IACC, you need to reset it.

Caution

The steering wheel (steering force) control system may not function or intervene unnecessarily under following circumstances:

- The system cannot recognize the lane markings because of rain, snow, dust, standing water or puddles, other obstruction on the road.
- The color of the lane markings is not clearly distinct from the road color.
- The lane markings are not clear or tampered by the traffic, or there are 2 or more lane markings on one side.
- There are other markings similar to the lane markings on the roads.
- The lane markings are covered in shadows of the median barriers, guardrails, noise barrier walls, roadside trees.
- There are environmental barriers, such as bollard.
- The traffic is heavy due to the construction in the area or traffic control items, such as traffic cones, are used to separate traffic flows.
- The lane markings are suddenly discontinued at roundabouts and road intersections.
- The vehicle is passing through a certain section, such as highway interchange, where the number of lanes increases or decreases.
- The width of the driving lane is too narrow or wide.
- The distance to the vehicle ahead is too short or a wheel of the vehicle ahead is touching the lane marker.
- There are other roadway markings on the roads, such as crosswalk markings, arrows, symbols, along with the lane markings.
- Poor visibility due to factors such as fog, heavy rain, heavy snow, etc.
- Hard to recognize other vehicles and pedestrians because of poor visibility.
- There is rapid change of illumination, for example at tunnel entry and exit points.
- The headlamps are not turned on or the brightness of the lamps is too low when driving at night or through tunnels.
- When you are traveling within or near the outer edges of the bus-only lane.
- The vehicle is driven on a steep hill or around sharp corners.
- the vehicle is driven under specific conditions which cause severe vibration.
- Objects with reflective surface (white paper, mirror, etc.) are on the dashboard.
- The windshield glass in front of the camera module is covered with ice, snow, slush, mud, dirt or debris.
- Fog or mist on the windshield.
- The temperature around the front view camera is too high because of the direct sunlight.
- The vehicle is moving towards a light source.
- The light from the sun, streetlamps, or headlamps of oncoming vehicles is reflected by the wet road surface.
- Bend such as sharp S-curve

To set safety distance to front vehicle

If the preceding vehicle is detected while the intelligent cruise control is operating, this system allows the driver's vehicle to maintain a distance to the preceding vehicle constant.

If the intelligent cruise control is activated, it will operate with the previously set safety distance without separate operation. If necessary, press the safety distance set button to change the inter-vehicle distance (safety distance) in 5 steps.

Set the safety distance according to the current vehicle speed.

Step 5 → Step 4 → Step 3 → Step 2 → Step 1

- The set speed returns to the value before intelligent cruise control (IACC) was disabled.

- If no preceding vehicle is detected, the vehicle travels at a speed set to the intelligent cruise control system.
- When the preceding vehicle accelerates and the inter-vehicle distance increases, the driver's vehicle accelerates only up to the set speed and then travels at constant speed.

4

Forward situation awareness

If the distance to the front vehicle is so close that a collision can occur or the front vehicle disappears from the front view due to lane change, etc. while the intelligent cruise control is activated, the message is displayed on the instrument cluster.

- If the driver has to operate the brake pedal or steering wheel, immediately reduce the vehicle speed or change the direction.

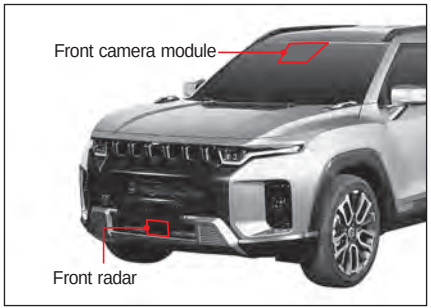
Caution

- **If the front vehicle disappears from the front view due to lane change, etc. while traveling and maintaining the distance to the front vehicle constant at a low speed the driver's vehicle may collide with a newly appearing stationary vehicle or object.**

Starting at congested areas

When the intelligent cruise control is operating, in congested areas, drive the vehicle while maintaining the distance to the front vehicle constant. Depress the accelerator pedal or push up the speed selector lever toward RES+ briefly or lower it toward SET- briefly to restart the vehicle 3 seconds after since the vehicle stops due to the front stationary vehicle.

Front detection sensor (Front radar + front camera)

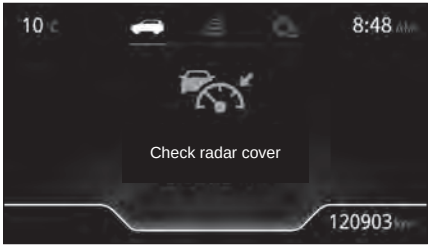


Front radar

It is a sensor that detects the front vehicle and allows the driver's vehicle to maintain the distance to the front vehicle constant and follow the front vehicle. If snow, rain, or foreign objects are stuck around the front sensor, the sensing performance of the sensor may deteriorate and intelligent cruise control may not function or may be temporarily disabled. Always keep the area around the front radar sensor clean.

Front camera

The camera detects the lane ahead of the vehicle through the sensor of the front camera module (FCM), allowing the vehicle to maintain the middle of the lane during intelligent cruise control operation. Always keep the area around the front camera module clean.



Caution

- **Always keep the area around the front detection sensor clean and never attach any accessory (license plate molding, sticker etc.).**
- **Be careful not to damage the sensor due to high-pressure washing or to prevent water from entering during car washing (lower part).**
- **After car washing, be sure to wipe off moisture around the sensor.**
- **Avoid subjecting the front bumper to impacts. The impact may change the sensing area of the sensor.**
- **Use a genuine sensor only.**
- **Do not paint the front bumper arbitrarily.**

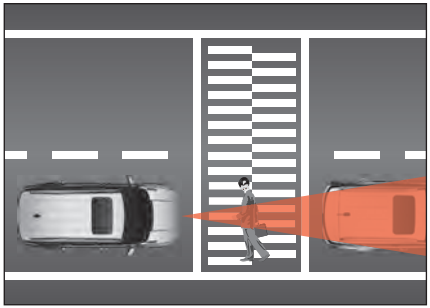
Vehicle detection is difficult under the following circumstances:

- Driving on a steep hill or sharp corners
- Driving under specific conditions which cause severe vehicle vibration
- A vehicle or a pedestrian recklessly cuts in front of you
- There is an approaching or reversing vehicle
- there is a vehicle with arbitrary shape
- Vehicle traveling close to one side lane or ahead
- Vehicle traveling at a very low speed or performing abrupt deceleration
- Stationary vehicle
- Vehicle with narrow rear structure (trailer, motorcycle, bicycle, etc.)
- When driving on a narrow road or a road with heavy curve
- When operating steering wheel
- When front part of vehicle lifted upwards due to excessive load in luggage compartment
- Foreign object stuck in sensor due to snow, rain, fog, etc.
- Vehicle which moves or is parked perpendicular to the direction of travel for your vehicle

Caution

- **The system may not recognize the preceding vehicle under the circumstances described earlier. Special care is required. Always be careful of motor traffic and reduce the vehicle speed by depressing the brake pedal, if needed.**

Not detected preceding pedestrian



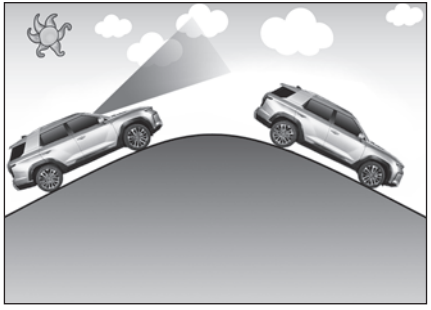
- The intelligent cruise control may not detect people.
- When traveling while maintaining the inter-vehicle distance, if a pedestrian appears in front of your vehicle, which can cause a dangerous situation.

Curved road

- The system may fail to recognize a preceding vehicle in the same lane on a curved road and accelerate the vehicle to the set speed rapidly.
- If the preceding vehicle is suddenly detected, the vehicle speed may decelerate rapidly.
- Always be careful of motor traffic and reduce the vehicle speed by depressing the brake pedal, if needed.

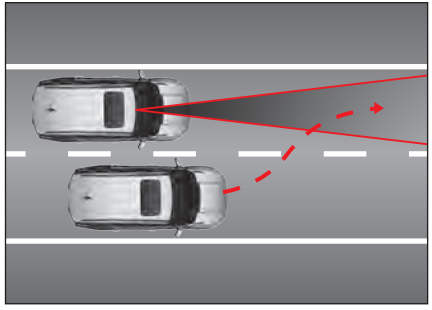
- It may detect a vehicle in a different lane on a curve and which may affect the driver's vehicle speed. Always be careful of motor traffic and reduce the vehicle speed by depressing the brake pedal.
- In this case, check the traffic conditions around you, then step on the accelerator pedal to prevent unnecessary deceleration.

Uphill or downhill

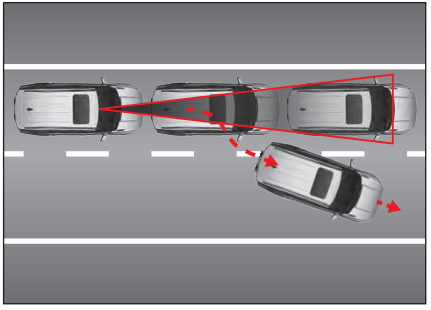


- The vehicle may accelerate to the driver set speed rapidly by failing to recognize a preceding vehicle in the same lane on an uphill or downhill.
- If the preceding vehicle is suddenly detected, the vehicle speed may decelerate rapidly.
- Always be careful of motor traffic on the uphill or downhill and reduce the vehicle speed by depressing the brake pedal, if needed.

To change lane

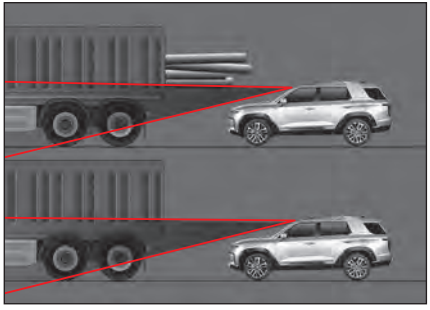


- When a vehicle in the lane next to you enters the same lane, the system may fail to recognize this vehicle until it enters into the sensor detection area.
- Be cautious at all times since the sensor may detect a vehicle cutting in suddenly late.
- Make sure to decelerate to maintain the vehicle-to-vehicle distance when an interposing vehicle's speed is lower than the driving speed.
- Make sure to keep the set speed to maintain the distance to a preceding vehicle when an interposing vehicle's speed is faster than the driving speed.



- If the front vehicle leaves the lane due to lane change, etc., be careful that there is a risk of collision because the system can not detect another vehicle ahead.

Detecting vehicle ahead



- Your attention is always required while driving behind a vehicle carrying cargo longer than the cargo bed or with high ground clearance because the AEBS may not work properly.

Warning

- **In the event of an emergency, always stop the vehicle by depressing the brake pedal.**
- **Keep safety distance at all times. In particular, if you set the distance to the preceding vehicle to closer at high speed, it can cause a very dangerous situation such as collision with the front vehicle.**
- **The adaptive cruise control system can not cope with the vehicles parked in front, vehicle stopping suddenly, pedestrians, vehicles coming on opposite sides, etc. The driver should always be careful to look ahead and respond to unforeseen circumstances.**
- **If the preceding vehicle changes lanes frequently, the sensor recognition response rate may be slower. The driver should always be careful to look ahead and respond to unforeseen circumstances.**
- **The adaptive cruise control is a convenience device for the driver and not a safety device. The safe maneuvering and controls are always the driver's responsibility.**

Warning

- **The driver should always be aware of the adaptive cruise control set speed and distance to the front vehicle.**
- **Always allow for extra distance between your vehicle and the vehicle ahead. Reduce the vehicle speed by depressing the brake pedal, if needed.**
- **The adaptive cruise control can not recognize complicated traffic conditions, so you should always be careful about traffic conditions while it is operation and the driver must adjust the vehicle speed personally in dangerous situations.**
- **To use the adaptive cruise control more safely, be sure to read and familiarize yourself with the user manual before using it.**

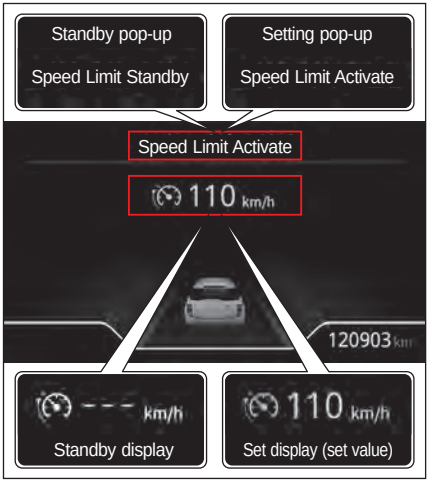
Caution

- **The adaptive cruise control may be deactivated in an instant by strong electromagnetic waves.**

Speed Limit*

The speed limit system is a safety device that prevents the vehicle from accelerating beyond the set speed even if the driver depress the accelerator pedal on his/her own will.

Images that show readiness and operation



Speed limit ready

The following message is displayed on the instrument panel LCD screen and the system enters speed limit READY state when you press the speed limit ON/OFF switch.

- "Speed limit READY" pop-up displayed
- Symbol and "--- km/h" indicating that system ready to display speed displayed

To set speed limit

When the speed limit is in Ready state and the speed selector lever is lowered, the following message is displayed on the instrument panel LCD screen and the speed limit is set (activated).

- "Speed limit set" pop-up displayed
- Symbol and set speed displayed

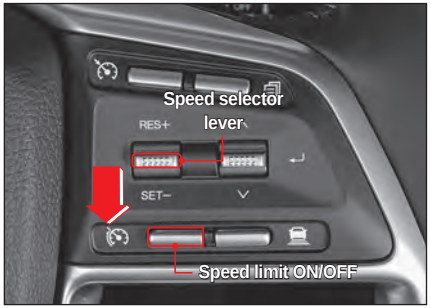
4

How to enable speed limit in instrument cluster

- Go to **Driving Assist → Front Safety Aid → Speed Limit Warning** under (User Settings) in the instrument cluster and tick the box.

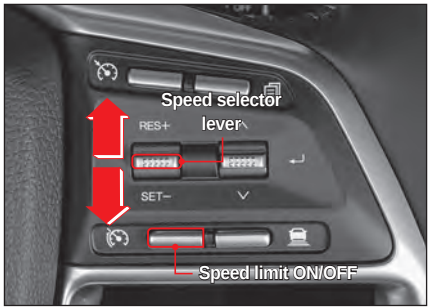
To Turn Speed limit ON/OFF

1. Press the speed limit ON/OFF switch. “Speed limit READY” message is displayed on the instrument cluster.
2. Lower the cruise speed selector lever toward SET- to set (activate) the speed limit.
   - “Speed limit set” message is displayed on the instrument cluster.
   - After that, the vehicle will not accelerate beyond the set speed, even if the accelerator pedal is depressed.
3. Press the speed limit ON/OFF switch twice with the speed limit control set (activated). The speed limit control will be deactivated. (pressing the switch once changes to standby (ready) state.)



To set speed

- When you raise or lower and hold the speed selector lever with the speed limit set (activated), the set speed is changed by 5 km/h.
- When you raise or lower the speed selector lever briefly with the speed limit set (activated), the set speed is changed by 1km/h.

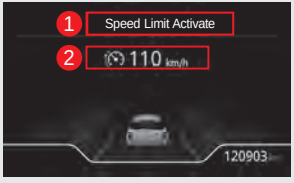


Notice

- **If the tires of your vehicle are replaced with tires with different size at your disposal, it may cause an error in the set speed. In this case, please contact our service center.**

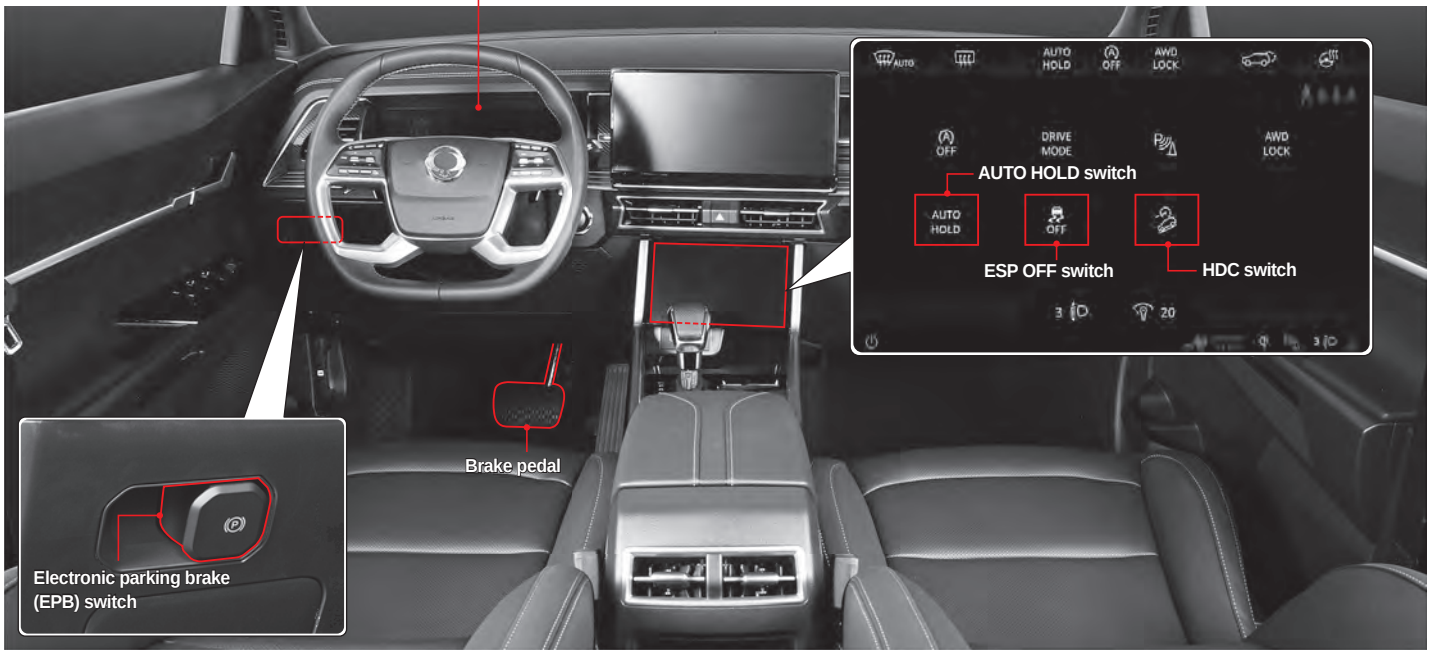
To deactivate speed limit warning

- Operate speed limit warning ON/OFF switch twice
- Operate cruise control ON/OFF switch once

Item	Message	Operating conditions
Speed limit system		• When you press the speed limit control ON/OFF switch with the ignition switch turned on, “Speed limit READY” message (1) and symbol (2) are displayed and the speed limit becomes ready.
		• When you pull down the cruise speed selector lever with the speed limit ready, “Speed limit set” message (1), symbol and set speed (2) are displayed and speed limit is activated. • Adjust the vehicle speed by pushing up or pulling down the speed control lever.
		• If you disable the speed limit during its operation (ready / set), "Speed limit disabled" message is displayed and the speed limit control is deactivated.

Warning Light and Indicator Related to Brake

							
ABS warning light	Parking brake ON indicator (red)	Electronic parking brake (EPB) warning lamp (orange)	Brake warning lamp	Electronic stability control (ESC) ON indicator/warning lamp	Electronic stability control (ESC) OFF indicator lamp	Hill descent control (HDC) ON indicator / warning lamp	AUTO HOLD indicator / warning lamp



Foot brake

Depressing the brake pedal can reduce the vehicle speed or stop the vehicle.

If the foot brake is used for a long period of time on a long downhill road, the fade or vapor lock phenomenon may occur due to the overheating of the brake system, reducing the braking performance and causing an accident.

Use the engine brake with a lower gear along with the foot brake on a long downhill road.

Caution

- **Reduce the speed properly using the engine brake on a slippery road such as an icy road or a snowy road.**

What is the fade phenomenon?

The fade phenomenon is the reduction of braking force due to a decrease in the friction force caused by a temperature increase in the friction surface of a brake when the brake is applied excessively on a long downhill road.

What is the vapor lock phenomenon?

The vapor lock phenomenon is the condition that when the brake is applied excessively on a downhill road, bubbles form in the brake fluid in the wheel cylinder or brake pipe of the hydraulic brake so that proper hydraulic pressure cannot be transferred, causing the brake system not to operate properly even if the pedal is depressed.

Warning

Checking for foreign materials on the pedal operation area

- **Before driving the vehicle, clean up the area where the brake pedal or the accelerator pedal is operated. If an empty can or an article is present below the pedal, it may obstruct the pedal operation, causing an accident. Be sure to check before driving the vehicle.**

Checking and replacing the brake pads/discs

Check the brake pads and discs at every 15,000 km of driving and replace if necessary. When replacing the brake pad, replace the left and right brake pads at the same time.

The replacement period of the brake pads and discs may vary depending on the driver's driving habit.

Warning

- **If you hear a screeching sound when you depress the brake pedal, have your vehicle checked and serviced at a nearby KG Mobility Authorized Service Center. Failure to do so may cause the brake not to operate, causing a serious accident.**

If the brake is not working

If the foot brake is not working while driving, decelerate the vehicle speed as much as possible using the engine brake and stop the vehicle safely by applying the parking brake slowly.

ABS (Anti-Lock Brake System)

If you apply sudden braking or apply braking on a slippery road, the vehicle continues to move forward but the wheels are locked, not rotating. In such case, steering may not be possible or the vehicle may spin, causing an accident.

In such case, the ABS controls the locking of the wheels properly to maintain the steering force and improve the steering stability of the vehicle.

In normal driving conditions, the braking system of a vehicle equipped with the ABS operates in the same way as the braking system of a normal vehicle.

Warning

- **The ABS system prevents a situation that the wheels are locked, disabling the steering of the vehicle, when the braking is applied. Therefore, the ABS system does not affect the braking distance significantly.**
- **When the ABS system operates and the braking force is created, the braking distance may become longer or shorter than the braking distance of a vehicle without the ABS system according to the road surface condition.**
- **When applying a sudden braking, depress the brake pedal strongly until the vehicle stops completely. Never take your foot off from the pedal or depress the pedal in a pumping manner.**
- **Even a vehicle equipped with the ABS system cannot prevent a risk of the vehicle skidding sideways. Be sure to keep a proper safe distance from a preceding vehicle and drive the vehicle at a low speed on a slippery road.**

Caution

- **A vehicle equipped with the ABS system performs the self-diagnosis function to check whether the system is abnormal or not after the engine is started and the vehicle is driven. In this process, the hydraulic pressure is transferred to the internal hydraulic system forcibly and the motor operates accordingly, so noises and vibrations may occur on the brake pedal. This indicates that the ABS is functioning normally.**
- **When the ABS system operates, you may feel vibrations through the brake pedal along with some noise. This is a normal phenomenon that occurs when the ABS system operates.**

ABS warning light

This warning light turns on when the START/ STOP switch is in the ON status and it turns off if the system is normal.

Warning

- **If the ABS warning light stays on after the engine is started or it turns on while driving, this indicates that an ABS-related system is abnormal, and the ABS system does not operate and only normal braking function is activated. In such case, have your vehicle checked and serviced at a KG Mobility Authorized Service Center promptly.**

Electronic Brake-Force Distribution (EBD)

The EBD system distributes the braking force to the front wheels and the rear wheels efficiently by controlling the braking pressure electronically when the brake pedal is depressed.

The EBD system is activated when the speed difference between the fastest front wheel and the slowest rear wheel is approximately 1 km/h or more, and it is deactivated when the ABS operates.

Brake warning lamp

This warning light turns on when the ignition switch is set to the ON position and turns off when there is no fault in the system.

Caution

- **When the EBD warning light turns on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Emergency Stop Signal (ESS)

The ESS function informs of a dangerous situation to a following vehicle by blinking the emergency braking light fast when a sudden braking is applied or the ABS system operates while driving.

The ESS function operates when the vehicle speed is 50 km/h or higher, and it operates in the sequence of “Input ESS signal” → “Operate emergency braking light” → “Operate the hazard warning lamp ”.

Notice
• **If the hazard warning lamp is on, the ESS function is not activated.**

Activation and deactivation conditions

	Emergency braking light
Activation conditions	• When the vehicle speed is 50 km/h or higher • When a sudden braking with the vehicle deceleration of 6.5m/s^2 or higher is applied • When the ABS system is operating while applying braking
Deactivation conditions	• If there is no ESS from the vehicle • When the hazard warning lamp is activated • When the ABS operation is finished

	Hazard warning lamp
Activation conditions	• If the vehicle speed is 50km/h or less at the time when the operation of the hazard warning lamp indicator is finished (canceled) • If the hazard warning lamp blinks for 10 seconds
Deactivation conditions	• When the hazard warning lamp is activated • When 10 seconds have passed after the hazard warning lamp is activated • When the vehicle speed has increased by 10 km/h or more after the hazard warning lamp is activated

Electronic stability control system (ESC)

The ESC system is an auxiliary driving safety system that controls the braking of each wheel or the engine output in order to correct the vehic le stability when it becomes unstable such as rapid cornering, helping the vehicle to avoid a dangerous situation.

- The ESC function is activated only when the vehicle becomes extremely unstable and it is not activated in normal driving conditions. You can confirm its activation from the blinking of the ESC indicator on the instrument cluster.

ESC indicator/warning light

- Indicator blinks: When the ESC function is activated
- Warning light turns on: When the ESC system is abnormal

Caution

- **If the ESC indicator blinks, drive slowly without accelerating.**
- **If the ESC warning light turns on, visit a KG Mobility Authorized Service Center and have your vehicle checked and serviced.**

Notice

- **The hazard warning lamp blinks for approximately 10 seconds to allow a vehicle right behind or around to prepare in advance when you apply sudden braking at the vehicle speed of 50 km/h or higher or the ABS system operates. (Emergency Stop Signal)**

ESC OFF indicator

A light touch of the ESC OFF switch will stop the ESC operation and illuminate the indicator.

Caution

- **If the ESC OFF indicator stays on even though you did not deactivate the ESC function, visit a KG Mobility Authorized Service Center and have your vehicle checked and serviced.**

Notice

- **A light touch of the ESC OFF switch will illuminate the ESC OFF indicator and the ESC function will not operate.**
- **Autonomous emergency braking (AEB) operates normally even when the ESC is turned off.**

Phenomenon that occurs when the ESC is activated

If the ESC is activated due to tight cornering, the ESC controls each wheel, so you can feel that the braking is applied to the relevant wheel, and vibrations on the brake pedal and noises may occur due to a change in the hydraulic pressure inside the system.

Also, the engine RPM may not increase due to the engine output control function if you depress the accelerator pedal.

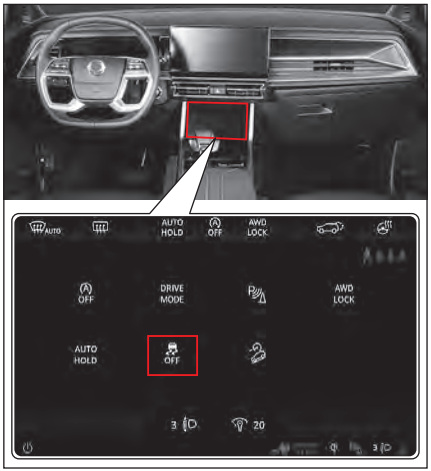
When it is necessary to deactivate the ESC function

If the left and right driving wheels are slipping on a snowy road or an icy road continuously, the ESC function is activated to control the engine driving force. Accordingly, the engine RPM cannot be increased even if you depress the accelerator pedal, disabling you to drive the vehicle.

In such case, deactivate the ESC function to restore the engine driving force so that you can drive the vehicle.

- To deactivate the ESC function, press and hold down the ESC OFF touch switch (for 3 seconds or more).

  The ESC OFF indicator on the instrument cluster turns on and the ESC function is deactivated.
- Pressing the ESC OFF touch switch again activates the ESC function.



Warning

- **Do not touch the ESC OFF switch while the ESC is operating. Touching the ESC OFF switch to interrupt the ESC function during rapid acceleration on a slippery surface or swivel acceleration may cause the vehicle to slip suddenly, leading to a very dangerous situation. Always deactivate the ESC function by touching the ESC OFF switch only when driving at a constant speed on a straight, flat road.**

Notice

A vehicle equipped with the ESC includes various auxiliary functions for improving the driving safety of the vehicle. The typical functions are as follows.

- **BAS (Brake Assist System)**

The BAS function detects a sudden braking situation and increase the brake pressure for a driver with leg strength who cannot apply sudden braking in a sudden braking situation.

- **ARP (Active Roll-over Protection)**

The ARP is an auxiliary safety function that helps the vehicle to maintain normal stability prior to the ESC when the driving status of the vehicle is highly unstable.

Caution

- **The ESC is just a driving safety assist system of the vehicle and it cannot control the vehicle beyond its physical limitation. Do not rely too much on this system and be sure to drive safely.**
- **The activation of the ESC (the ESC indicator blinks) indicates that the vehicle is highly unstable. In such case, reduce the vehicle speed and drive the vehicle safely.**
- **The ESC is not activated when reversing the vehicle.**

- **Do not drive the vehicle immediately after starting the engine. When you drive the vehicle within 2 seconds after starting the engine, the self-diagnosis function of the ESC is not carried out and the ESC is activated in early stage while driving so that symptoms such as the ESC warning light turning on, warning buzzer and the generation of braking force on each wheel may occur.**
- **When the ARP function is activated, the braking of the engine and each wheel is controlled more powerfully in comparison to normal ESC operation, so the vehicle speed may decrease rapidly or strong braking force on each wheel is created, making the steering status unstable.**
- **When the ESC operates, vibrations and noises may occur on the brake pedal and other relevant devices due to a change in the hydraulic pressure inside the device.**
- **A vehicle equipped with the ESC may have slight vibrations while the self-diagnosis function is being carried out for the system, but this is a normal phenomenon.**

Hill Descent Control (HDC)

HDC is the system that decelerates the vehicle automatically to allow the driver to drive the vehicle at a low speed without depressing the brake pedal when the driver intends to drive the vehicle on a steep road at a low speed.

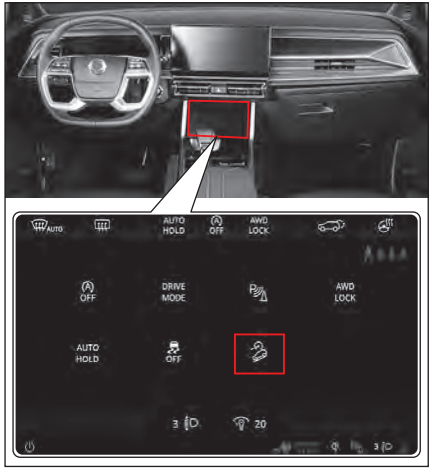
The variable type HDC applied to this vehicle operates flexibly in the range between 5 km/h and 30 km/h according to the vehicle environments (operation status of brake and accelerator pedal).

Warning

- **Do not use the HDC function on a normal road. The HDC function is for driving on a downhill road, and using it on a normal road may cause a collision with a following vehicle.**

Activating/deactivating the HDC function

- Lightly touching the HDC switch turns on the HDC indicator on the instrument cluster and set the HDC system in Standby state.
- Touching the HDC switch again turns off the HDC indicator and deactivates the HDC function.



HDC indicator/warning light

- Green indicator turns on: HDC in ready status
- Green indicator blinks: The HDC is operating.
- Red warning light turns on: The HDC system is overheated and abnormal.

Caution

- **When the red warning light turns on, the HDC function is not activated.**
- **When the red HDC indicator turns on, it indicates that the HDC system is overheated or abnormal. If the red HDC indicator stays on after the HDC-related device has been cooled down properly, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

HDC activation conditions

- When the HDC function is activated (green HDC indicator turns on)
- Within a certain degree of slope or higher and the operating speed range (approximately 2 km/h ~ 50 km/h)
- When the ESC function (including the BAS function) is not activated

HDC deactivation conditions

- When the HDC function is deactivated (green HDC indicator turns off)
- Degree of slope below the HDC activation condition
- When the vehicle speed is less than 2 km/h or more than 50 km/h
- When the HDC system is abnormal
- When the HDC system is overheated

Notice

- **While the HDC function is being activated, the driver can accelerate or decelerate the vehicle to the desired speed (approximately 5~30km/h) for driving by depressing the brake pedal or the accelerator pedal. However, if the vehicle speed is less than 2 km/h or more than 70 km/h, the HDC function is deactivated.**

HDC operation

If the conditions for activating the HDC are met, the HDC is activated and the green HDC indicator on the instrument cluster blinks. If the vehicle speed becomes less than 2 km/h or more than 70 km/h or the sloping road becomes gentle while the HDC function is being activated, the HDC operation stops.

While the HDC function is operating, strong operating sounds and vibrations occur on the brake and this is normal according to the HDC operation.

Caution

- **The HDC function is for off-road driving on a steep downhill road.**
- **If the HDC function is used frequently, the brake system or the ESC may not operate normally.**
- **Avoid using the HDC function when driving on a normal road. If you drive the vehicle with the HDC ready status on a flat road, the HDC function may be activated when you make a tight cornering or pass through a speed bump.**
- **When the HDC is activated, vibrations and noises occur on the brake pedal and other relevant devices due to a change in the hydraulic pressure inside the device. This is a normal phenomenon according to the activation of the HDC.**

Electronic Parking Brake (EPB)

The EPB is the parking brake system with enhanced safety and stability that the parking brake is applied and released through a simple switch operation.

Warning

- **Do not allow a person who is unfamiliar with the EPB (especially a child) to operate the EPB. Failure to do so may cause an accident according to the parking and stopping status.**

Caution

- **When the temperature falls down below zero during winter, the parking brake may not be released due to the freezing of EPB-related devices.**
- **Driving the vehicle forcibly with the parking brake not released due to the freezing of a EPB-related device may damage the relevant device. Noises may also occur when driving the vehicle.**
- **When you park the vehicle on a flat and safe place in a weather with below zero temperatures, use a chock on the wheels after parking instead of using the EPB.**

Applying the EPB

1 Park the vehicle on a flat and safe place.

2 Pull the EPB switch.

The parking brake warning light on the instrument cluster turns on and the EPB is applied.

Releasing the EPB

With the brake pedal depressed, press the EPB switch.

The parking brake warning light on the instrument cluster turns off and the EPB is released.

Releasing the EPB automatically

When you fasten the seat belt with the driver seat door, engine hood and tailgate closed and drive the vehicle normally, the EPB function is released automatically.

Notice

- **If the driver seat door, engine hood or tailgate is not closed or the seat belt is not fastened, the EPB auto release function is not activated.**

EPB warning light/brake warning light

EPB warning light

- The EPB amber warning light turns on when the EPB system is abnormal.

Parking brake ON indicator (red)

The warning light turns on in any of the following situations.

- When the parking brake is operating normally
- When the gear shift lever is moved to the P (parking) position with the AUTO HOLD activated

Caution

- **When applying or releasing the EPB, check if the parking brake warning light turns on or off on the instrument cluster.**
- **If the EPB switch is operated abnormally (excessive or continuous operation), the EPB warning light may turn on. At this time, when you turn off the engine and turn the START/STOP switch in the ON status, the warning light turns off and the EPB operates normally.**
- **If the EPB warning light stays on, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**
- **If the parking brake warning light stays on even though the parking brake has been released, have your vehicle checked and serviced at a KG Mobility Authorized Service Center immediately.**

EPB emergency mode

When you pull the EPB switch up if the brake system malfunctions or you cannot depress the brake pedal while driving, the EPB is applied while the EPB is being pulled.

However, the braking distance may increase significantly in comparison to normal brake operation.

Warning

- **Never use the EPB emergency mode while driving unless it is an emergency. Doing so may damage the vehicle system and may make the driving status unstable due to the braking force while driving, resulting in an accident.**
- **If the brake system has a critical failure, the EPB emergency mode may not operate.**

Caution

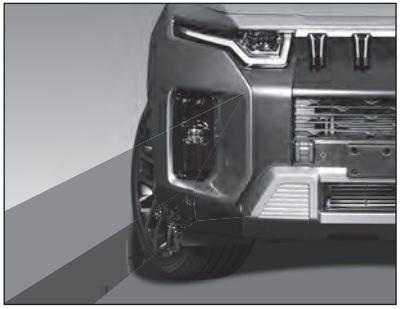
- **If you need to park the vehicle with a faulty EPB, place the gear shift lever in the P (parking) position and park the vehicle on flat ground.**
- **If a noise or a smell of burning occurs from the relevant devices after operating the emergency mode, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Caution

- Before driving, be sure to check if the parking brake warning and the low oil warning light on the instrument cluster turn on.
- Be sure to release the parking brake before driving. Driving the vehicle with the parking brake applied may damage the brake system.
- When you use the parking brake for stopping while driving, move the gear shift lever to the P (parking) position or the N (neutral) position for safety.
- Do not use the P (parking) position of the gear shift lever instead of the parking brake. Be sure to apply the parking brake firmly when stopping or parking the vehicle.
- If you intend to place the gear shift lever in the N (neutral) and park the vehicle, turn off the engine with the gear shift lever in the P (parking) position, press the Gear shift lever unlock button and move it to the N (neutral) position.
- Be sure to place the gear shift lever in the P (parking) position when parking or stopping the vehicle, If the gear shift lever is not in the P (parking) position when parking or stopping, the vehicle may move due to an impact from the outside or along the road surface.

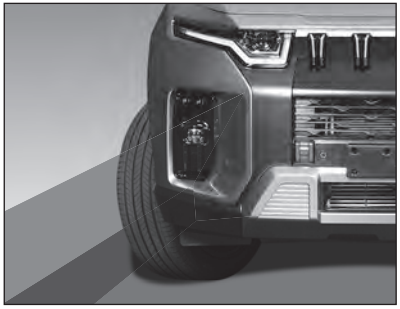
When parking the vehicle on a uphill road

- When you park the vehicle on a uphill road, park the vehicle with the steering wheel turned in the opposite direction from the curb.



When parking the vehicle on a downhill road

- When you park the vehicle on a downhill road, park the vehicle with the steering wheel turned in the direction toward the curb.



AUTO HOLD

When the “AUTO HOLD” function is activated, the vehicle keep the brake pressure in order to hold the vehicle stationary when you stop the vehicle by depressing the brake pedal in order to wait for a signal or in case of traffic congestion.

- In R (reverse) position, the AUTO HOLD function does not work.
- When you depress the accelerator pedal, the brake is released automatically, allowing you to drive the vehicle.

To Set / Deactivate AUTO HOLD Function

- Lightly touching the AUTO HOLD switch sets the AUTO HOLD function.
- When the AUTO HOLD function has been set, lightly touching the AUTO HOLD switch deactivates it.
- If you turn the ignition off and back on, the AUTO HOLD function will be deactivated.
- When the ignition switch is turned off and turned on back, the AUTO HOLD function maintains the state before turning off the ignition.

Using the AUTO HOLD function

1. Touch the AUTO HOLD switch.

   The AUTO HOLD indicator (white) on the instrument cluster turns on.

2. Stop the vehicle completely by depressing the brake pedal while driving.

   The color of the AUTO HOLD indicator changes from white to green and the brake is applied.

3. Depress the accelerator pedal slowly when driving the vehicle.

   The color of the AUTO HOLD indicator changes from green to white, and the brake is released.

Warning

- **When you drive the vehicle on a downhill road, do not depress the accelerator pedal suddenly. Doing so may cause the vehicle to move fast, causing a dangerous situation.**

AUTO HOLD indicator/warning light

- White indicator turns on: AUTO HOLD function in ready status.
- Green indicator turns on: AUTO HOLD function is activated and maintain the brake pressure to keep the vehicle stationary.
- Yellow warning light turns on: When the AUTO HOLD system is abnormal.

Caution

- **The Auto Hold does not operate when:**
  - **The driver's door is opened**
  - **The engine hood is opened**
  - **The tailgate is opened**
  - **The gear shift lever is in 'P'(Park) position**
  - **The EPB is applied**
- **The 'Auto Hold' automatically switches to EPB in such cases:**
  - **Shifted to P (park) position**
  - **The driver's door is opened**
  - **The engine hood is opened**
  - **The tailgate is opened**
  - **The vehicle is in a standstill for more than 10 minutes**
  - **The vehicle is standing on a steep slope**
  - **Ignition turned off**

Caution

- **In R (reverse) position, the AUTO HOLD function does not work.**
- **Be sure to deactivate the AUTO HOLD function if wheel drive is necessary such as automatic car wash.**
- **During the break-in period of parking brake pads, the braking force of the parking brake may be slightly reduced. (If the vehicle is parked on a sloping road, the vehicle may roll down.)**
- **Check the brake pads for wear and the operation status of the Electronic Parking Brake (EPB) every 10,000 km.**
- **When the Electronic Parking Brake (EPB) is applied, a mechanical operating sound may occur. This is a normal operating sound of the Electronic Parking Brake (EPB) system.**
- **If the Electronic Parking Brake (EPB) warning light turns on, the Electronic Parking Brake (EPB) operation is abnormal, have your vehicle checked and serviced at a KG Mobility Authorized Service Center. If you need to park the vehicle in case of emergency, stop the vehicle on flat ground, place the gear shift lever in the P (parking) position and use a chock on the wheels.**

Autonomous Emergency Braking (AEB)*

The AEB (Autonomous Emergency Braking) is an assist device that warns the driver of the risk of collision when a collision with the front vehicle or pedestrian is expected by the sensor of the front sensor module (front camera module and front radar).

This system informs the driver about the collision risk with the warning message and warning buzzer according to the level of collision risk. If this collision risk persists, this system controls the braking force to avoid collision or relieves the shock when a collision occurs, improving the safety of the driver and pedestrians.

1st collision alert → 2nd collision warning → 3rd emergency braking → Vehicle stop

Warning

- **AEB is only an auxiliary system for helping the driver to secure safety in a dangerous situation and it does not avoid a collision situation automatically. The driver is responsible for the vehicle safety and control.**

Notice

- **The AEB is set and Medium is set for the sensitivity of the forward collision warning as the factory default settings.**

AEB indicator/warning light

AEB OFF indicator

The AEBS OFF indicator lights up on the instrument cluster when the AEB function is disabled.

Notice

- **A light touch of the ESC OFF switch will illuminate the ESC OFF indicator and the ESC function will not operate.**
- **Autonomous emergency braking (AEB) operates normally even when the ESC is turned off.**

AEB indicator/warning light

The AEB indicator and warning light operate as follows depending on the AEB status.

- Blink: AEB is operating
- Turn on: AEB is abnormal

A warning message is displayed on the display of the instrument cluster as follows according to the AEBS status.

AEB is operating

AEB is abnormal

AEB is activated

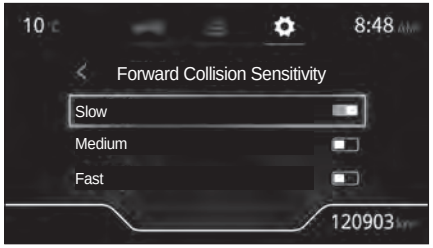
When you put a check mark on (User Settings) → Driving assist → Front Safety Aid → AEB (Automated Emergency Braking) from the instrument cluster, the function is activated and the AEBS OFF indicator on the instrument cluster turns off.

When you remove the check mark from the AEB, the function is deactivated and the AEBS OFF indicator turns on.

Caution

- **Activate or deactivate the AEB system before driving the vehicle or after stopping the vehicle at a safe place for safety.**
- **When the ESC function is deactivated, the AEB function is also deactivated automatically even if it was activated previously. The AEB function can also be activated from the User Settings menu on the instrument cluster.**

Setting the sensitivity of the forward collision warning



You can change the setting from (User Settings) → Driving assist → Forward Collision Sensitivity on the instrument cluster.

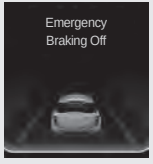
- If Fast is set, the AEB warning is issued fast.
- If the AEB warning is too fast, set it to Medium or Slow.

Caution

- **Even if Fast is set for the sensitivity of the AEB warning, you may feel it is slow when a front vehicle applies a sudden braking.**

4

AEBS operation

Classification	Collision alert (1st warning)	Collision alert (2nd warning)	Emergency braking (3rd warning)	Vehicle stop
	 Degree of collision risk 			
Display window of the instrument cluster				
Warning buzzer	Sounds 7 beeps for 1 second			-
Vehicle control	-	The system applies partial braking.	Full brake control before collision.	Maintain the braking force for approximately 2 seconds after the vehicle stops.

Warning

- **The AEB is an auxiliary system that helps the driver to secure safety in a dangerous situation and it does not guarantee safety.**
- **The AEB does not recognize all urgent and dangerous situations.**
- **Do not attempt dangerous driving for activating the AEB.**
- **The AEB does not avoid a collision situation automatically. The driver is responsible for the vehicle safety and control.**
- **Always secure safe braking distance and depress the brake pedal to reduce the vehicle speed if necessary.**
- **The AEB is activated according to the distance from a front vehicle or a pedestrian, relative speed and the driver's response.**
- **The AEB detects the driving situation through the front sensor module (front camera module and front radar). If the driving situation is not covered by the front camera, the performance of the system may deteriorate.**

Activation conditions

When the following conditions are met after the AEB is activated, the system operates normally.

- When the AEB is activated
- When the Electronic stability control system (ESC) is activated
- When the Front Camera Module (FCM) recognizes a vehicle and a pedestrian at the front normally
- When the vehicle speed is between 8 km/h and 60 km/h

Notice

- **The AEB is ready to operate in preparation of an urgent (dangerous) situation and when the driver depresses the brakepedal, this auxiliary system responds promptly.**
- **When the AEB is activated, it supplements the optimal braking force required for decelerating the vehicle.**
- **If the urgent (dangerous) situation is cleared, the AEB control stops.**
- **The 1st warning is activated up to the vehicle speed of 180 km/h.**

Deactivation conditions

When the following conditions are met after the AEB is activated, the system is deactivated and the AEB does not operate.

- When the AEB is deactivated
- When the vehicle speed exceeds 60 km/h
- When the steering wheel is operated
- When the gear shift lever is placed in the P (parking) or the R (reverse) position
- When the accelerator pedal is depressed

The AEB cannot detect a vehicle properly:

- on a sharply curved section or a steeply sloping road
- when the vehicle wobbles significantly
- when the tail lights of a front vehicle are asymmetrical or are not turned on at night
- when the rear side of a front vehicle is asymmetrical
- when a vehicle cuts in suddenly
- An animal, an object or a vehicle driving, or when the vehicle is driving in the opposite direction
- An approaching vehicle or a vehicle that is reversing
- An odd-shaped front vehicle
- When there is rapid change of illumination (tunnel entrance, etc.)
- When the shape is not visible due to shade right below an overpass

- There is poor visibility due to bad weather such as snow, rain and fog
- When the moisture formed on the glass of the windshield is not removed completely
- When the reflection from an object placed on the dashboard panel obstructs the recognition of the Front Camera Module (FCM)
- When there is a narrow object such as a motor cycle or a bicycle in front of the vehicle
- A vehicle moving or stopping perpendicularly to the driving direction at an intersection

Caution

- **The driver's attention is required since the AEB may not respond normally or the system may malfunction when it is difficult to detect a vehicle.**

Curved road

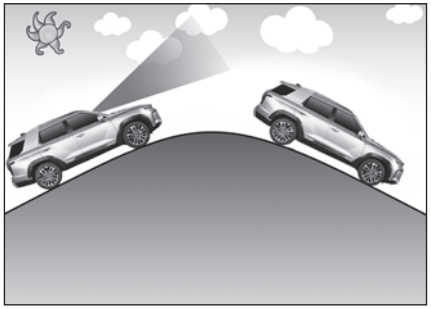
On a curved road, a front vehicle on the same lane cannot be detected and the AEB performance is reduced so that unnecessary warning or braking is applied or the system may not operate.

Check the front road and driving conditions on a curved road and adjust the vehicle speed directly by depressing the brake pedal if necessary.

A vehicle on another lane may be detected, affecting the speed. Check the front road and driving conditions and adjust the vehicle speed directly by depressing the brake pedal if necessary.

In such case, you can prevent unnecessary deceleration by depressing the accelerator pedal.

Sloping road

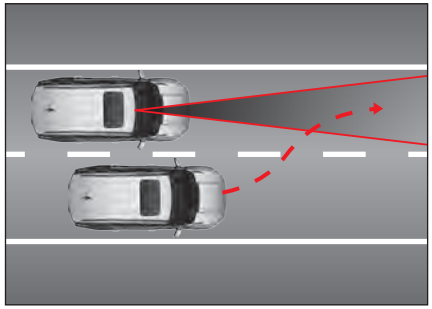


On a uphill road or a downhill road, a vehicle on the same lane cannot be detected and the AEB performance is lowered so that unnecessary warning or braking is applied or the system may not operate.

Also, a front vehicle is detected suddenly and the warning and braking may be applied.

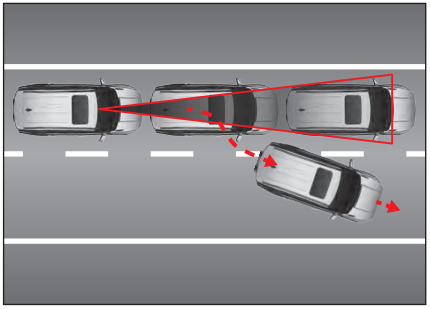
Check the front road and driving conditions on a uphill road or a downhill road and adjust the vehicle speed directly by depressing the brake pedal if necessary.

When changing the lane



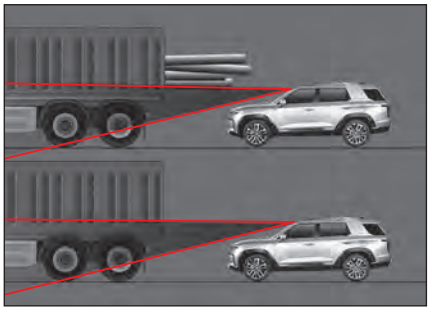
When a vehicle on the next lane changes the lane to the same lane, the vehicle may not be detected until it enters the detection range of the Front Camera Module (FCM).

Always pay attention since a vehicle that cuts in suddenly may be detected late.



Caution should be taken that if there is a vehicle stopped in front of the vehicle ahead and the vehicle ahead moves out of the lane while your vehicle has been decelerated due to the AEB operation, the vehicle stopped at the front is not selected as the control target, causing a collision risk.

Recognition of a vehicle ahead



Caution should be taken that a tall vehicle or a vehicle with cargo sticking out the back of the vehicle may cause a dangerous situation.

The AEB cannot detect a pedestrian

- who is not standing normally
- whose body is hidden or who does not walk upright
- who moves fast
- who cuts in suddenly
- who wears clothes in a color similar to the background
- when the surrounding illumination intensity is too high or too low
- at night or when the surrounding area is dark
- if there is a structure similar to a person
- if he/she is short
- whose behavior is unstable
- When there is a situation that disables the AEB to detect a pedestrian by environments
- when there are many people gathered together
- When there is an object (cart, bicycle, two-wheeler, suitcase, stroller, etc) pushed by the pedestrian

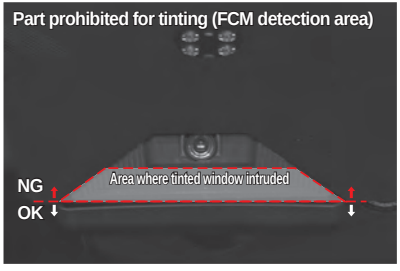
Warning

- **The AEB is not activated in all situations. Therefore, do not test the AEB targeting a person or an object. Doing so may cause serious injury or death.**
- **When you start the vehicle, the AEB is always activated automatically. If you need to deactivate the function, use the User Settings menu on the instrument cluster.**
- **If the AEB is activated and you apply a sudden braking, occupants in the vehicle may face danger. Therefore, always pay attention just in case.**
- **If the front camera is stained with foreign materials, its detection function is lowered and the AEB is deactivated temporarily. Always keep the camera clean.**
- **If the front camera has deviated from its normal position due to a shock, the system may not operate normally even if the warning light does not turn on or the warning message is not displayed on the instrument cluster.**
- **At night, the vehicle and pedestrian detection performance may be lowered since the lighting condition is poor in comparison to daytime.**
- **If frost forms on the windshield during winter, the front camera may not detect normally. Be sure to remove the frost.**

- Failure to do so may result in unnecessary warning and braking, and the warning and braking may not be applied due to the detection limitation of the sensor.
- If a vehicle ahead applies a sudden braking, proper brake application may not be carried out, causing a collision. Always pay attention in preparation for a dangerous situation.
- If you tow another vehicle or a trailer, cancel the AEB setting. Applying braking while towing may lower the safety of the vehicle.
- When you load the vehicle on a truck, a train or a ship that transports a vehicle, deactivate the AEB. The system may be activated according to the contact condition in the loading process.

Caution

- The AEB may be deactivated temporarily by a strong electromagnetic wave.
- Do not tint the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate.



Rear and side warning system*

The rear and side warning system is an auxiliary system that detects and informs the blind spot area that cannot be detected by the driver using the detection sensor located inside of both edges of the rear bumper.

- The rear and side warning system includes the following warning systems.
  - Blind spot-detection warning (BSW) system
  - Blind spot collision assist (BSA) system
  - Lane change warning (LCW) system
  - Rear cross traffic warning (RCTW) system
  - Rear cross traffic assist (RCTA) system
  - Safety exit warning (SEW) system

Display of rear and side warning system activation

1 Outside rearview mirror warning light

When the outside rearview mirror warning light blinks twice with the START/STOP switch in the ON status or while the engine is running, it indicates that the rear and side warning system is operating normally.

Note

- **You can change the BSW system settings in User Settings in the instrument cluster.**

Warning

- **The rear and side warning system is an auxiliary system that helps the driver to drive the vehicle safely. Avoid depending on the rear and side warning system in any case and drive the vehicle while checking the road condition.**

Caution

- **Always keep the rear bumper clean. The sensor that detects the rear and both sides of the vehicle is installed inside of both edges of the rear bumper. If the rear bumper is stained with foreign materials, the sensors may not function normally**
- **When the rear bumper is replaced, painted or repaired, the system operation performance may be lowered.**
- **The detection sensors of the system may not operate depending on the surrounding environment. Drive the vehicle while checking the road condition directly for an emergency situation.**
- **Failure to do so may cause the system to malfunction due to a strong electromagnetic wave.**

Warning Steps in BSW System

A first warning or second warning is issued when a vehicle approaching at a driving speed that matches the function settings of the blind spot-detection warning system is detected.

1st warning

Left (On)

Right (On)

- Red warning lamp flashes on outside rearview mirror
- Functions affected by first warning
  - Blind spot-detection warning (BSW) system
  - Lane change warning (LCW) system

2nd warning

Left (On)

Right (On)

Warning buzzer (inside the vehicle)

- Red warning lamp flashes on outside rearview mirror
- Warning buzzer sounds in vehicle
- Functions affected by second warning
  - Blind spot-detection warning (BSW) system
  - Blind spot collision assist (BSA) system
  - Lane change warning (LCW) system
  - Rear cross traffic warning (RCTW) system
  - Rear cross traffic assist (RCTA) system
  - Safety exit warning (SEW) system

When the rear and side warning system is abnormal

When the rear and side warning system is abnormal, a warning message is displayed on the display of the instrument cluster.

Caution

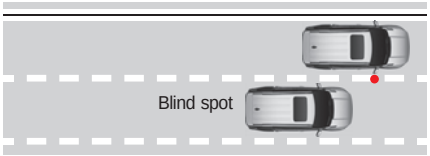
- **When the warning message on the faulty RCTW is displayed, all the RCTW relevant functions are disabled.**
- **If the warning message persists, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

If the sensor cannot detect the rear and both side areas of the vehicle normally with the rear and side warning system activated, the message is displayed on the display of the instrument cluster.

- When there is a foreign material on the outside and inside of the rear bumper
- When equipment such as a trailer is installed on the rear of the vehicle
- When driving on open area where no objects around road continuously (e.g., desert, meadow)
- When there is a heavy snow or a heavy rain
- When the width of the road is wide

Blind Spot Detection Warning (BSW) system

The BSW system detects a vehicle approaching the blind spot on the rear and both sides of the vehicle and informs it to the driver by turning on the outside rearview mirror warning light.



Activating / deactivating BSW system

- Go to Driving Assist → Rear Side Safety Aid → Rear Side Warning and Collision Assist → Collision Warning in (User Settings) in the instrument cluster and tick the check box.

Activation conditions

The BSW system is activated when the following conditions are met.

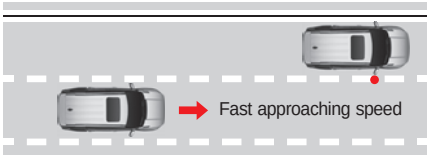
- When the rear and side warning system is activated
- When the vehicle speed is more than 20 km/h and less than 255 km/h
- When a vehicle is present in the blind spot detection area

Warning

- **The Blind Spot Warning (BSW) system can only give a warning in a limited area and the warning function may not operate for a vehicle approaching the rear blind spot depending on the surrounding situation and driving conditions.**

Lane Change Warning (LCW) system

The LCW (Lane Change Warning) system is designed to alert the driver by flashing the outside rearview mirror and sounding the beep when a fast approaching vehicle is detected from the rear side of the driver's vehicle.



Operating conditions

The LCW system activates the warning system when the following conditions are met:

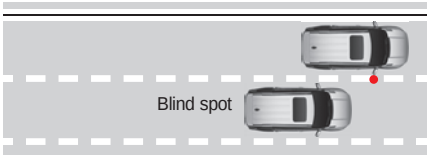
- BSW system is activated.
- Vehicle speed is between 20 km/h and 255 km/h.
- When a vehicle approaching at a high speed is in the detection area.
- Driver's vehicle is driving on a straight road.

Warning

- **This system is an aid to ensure the driver convenience. If you depend on this system, it may cause accidents. Always check the surroundings with a side mirror when changing lanes.**

BSA System

The BSA (Blind Spot-collision Assist) system is a system that, when the driver's vehicle unintentionally closes to the lane, directs the vehicle through one-sided braking to the center of the lane when a collision with the vehicle in the rear blind spot is expected, and notifies the driver by illuminating the warning light in the outside rearview mirror.



Activating / deactivating BSA system

- Go to Driving Assist → Rear Side Safety Aid → Rear Side Warning and Collision Assist → Collision Assist in (User Settings) in the instrument cluster and tick the check box.

Operating conditions

The blind spot collision assist (BSA) system issues a warning when:

- Blind spot collision assist (BSA) is set.
- Vehicle speed is between 60km/h and 140km/h.
- Vehicle is driving on a road where both lanes are recognized normally with no brake applied. (including AEB and ACC)

BSA is deactivated when:

- Driver turns the steering wheel sharply.
- Part of vehicle has already entered the next lane.
- Brake pedal is depressed.
- The brake-related function is working (such as ACC, AEB, ESC and ABS)

Caution

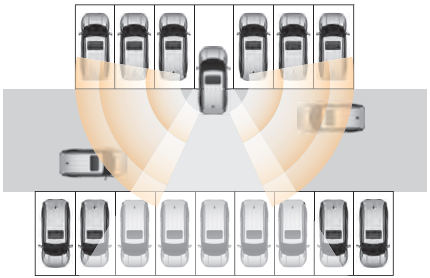
- **After changing lanes, you must move to the center of the lane. The system may not work if the vehicle continues to drive close to the lane.**

Warning

- **The braking control may not work depending on the electronic stability control (ESC).**
- **When the electronic stability control (ESC) warning light comes on, the braking control does not work.**
- **When the electronic stability control (ESC) performs another function, the braking control does not work.**

RCTW System

The RCTW (Rear Cross Traffic Warning) system is a system that, when a vehicle is detected approaching from the rear left/right side during reversing the vehicle, displays a warning message in the instrument panel display window, sounds a audible alert and illuminates the warning lamp in the outside rearview mirrors to inform the driver.



Activating / deactivating RCTW system

- Go to **Driving Assist → Rear Side Safety Aid → Rear Cross Traffic Warning and Collision Assist → Collision Warning** in (User Settings) in the instrument cluster and tick the check box.

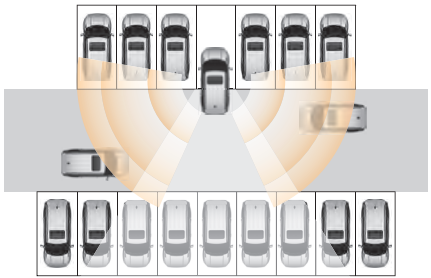
Activation conditions

- RCTW system is activated
- If the gear shift lever is placed in the R (reverse) position
- When the vehicle speed is less than 10km/h
- If a vehicle exists within the RCTW range and the speed of the approaching vehicle is 24 km/h or less

If an approaching vehicle is detected, the approach message from the relevant side is on the display of the instrument cluster.

RCTA System

The RCTA (Rear Cross Traffic-collision Assist) system is an assistive device that outputs a warning message and a buzzer to inform the driver of risk of collision due to a vehicle approaching to your side when backing up and help collision avoidance or mitigate damage by applying brake assist.



Activating / deactivating RCTA system

- Go to **Driving Assist → Rear Side Safety Aid → Rear Cross Traffic Warning and Collision Assist → Collision Assist** in (User Settings) in the instrument cluster and tick the check box.

Operating conditions:

- Rear cross traffic-collision assist (RCTA) enabled
- Shift lever in R (reverse) position
- Vehicle speed of below 8 km/h
- Vehicle in warning area with approaching speed of less than 24 km/h
- If the risk of collision is detected due to an approaching vehicle during operation of the RCTA system, emergency braking (braking assist) is performed.
- The braking assist does not restart for about 10 seconds after it operates.

Note

- **This system may not function depending on the operation of ESC system.**
  - **When ESC warning lamp light up**
  - **When ESC system is operating**

Cases where RCTA system not work

In any of the following cases, the RCTA may not operate.

- If the target vehicle is out of the RCTA detection area
- If the target vehicle is right behind
- If the target vehicle is moving in the same direction
- If the speed of the target vehicle is fast
- If the speed of the target vehicle decreases suddenly
- If the detection sensor is covered with an obstacle

Cases where the RCTA system malfunctions

In any of the following cases, the system may malfunction, so the driver's attention is necessary.

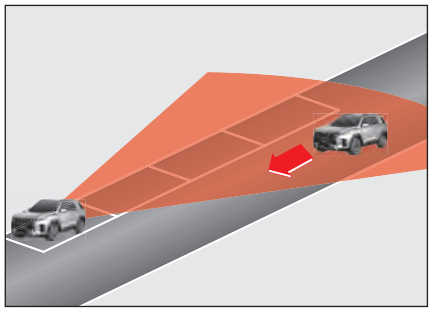
- If the rear bumper is stained with foreign materials (rain, snow, dust, sticker, etc)
- When equipment such as a trailer is installed on the rear of the vehicle
- When the rear bumper is damaged or the vehicle body is distorted
- Sharp curve, tollgate entrance and exit section
- Tire pressure imbalance and excessive loading
- Bad (heavy snow, heavy rain) weather
- When there is a fixed object (median strips, guardrails, noise barriers) on the road or a construction section
- When a large vehicle or a small motor cycle (bicycle) is driving at a close range
- When your vehicle is passing by heavy-duty trailer
- When you accelerate the vehicle with an opposite vehicle together at the same time
- When the speed of a vehicle behind is very fast (passing)
- When you change the lane
- Steep uphill road, downhill road or a road condition where the height of lanes is different
- When an opposite vehicle is driving very closely to the rear side of the vehicle
- When a vehicle behind driving closely passes
- When the area near the sensor is covered with a vehicle, a column or a wall in the parking lot
- A vehicle that moves in the same direction when reversing the vehicle
- A small moving object such as a person, a shopping cart or a stroller
- When parking conditions are complicated (diagonal parking, near the ramp, obstacle, etc.)
- A vehicle with very low vehicle body
- A narrow road densely covered with trees or grass
- When the width of the road is very wide
- When the road surface is wet
- When the sensor detection area is changed due to a rear collision

Warning

- **The Rear Cross Traffic Warning (RCTW) system does not give a warning for an article adjacent to the vehicle and the warning function may not be activated for a vehicle approaching fast in the rear.**
- **The BSW and RCTW are assistive devices for the driver, not the safety devices. If you depend on these systems, it may cause accidents. The driver is responsible for safe driving of the vehicle by maneuvering the brake pedal. Depending on the surrounding environment and driving conditions, the warning and control functions of the system may not operate or may operate unnecessarily. Always check the surroundings while driving.**

SEW System

The SEW (Safety Exit Warning) system is an assistive device that warns the driver and passengers about the risk of an accident by displaying a warning message on the instrument panel along with a buzzer when there is a vehicle approaching from the rear side when the driver or passenger is getting off the vehicle.



Caution

- **The exit assist function operates for about 10 minutes after the ignition switch is turned off. After about 10 minutes, the exit assist function does not work to prevent battery drain.**
- **When you lock the door with a smart key, the exit assist function will not work immediately.**

Activating / deactivating SEW system

- Go to **Driving Assist → Rear Side Safety Aid → Safety Exit Warning** in ⚙ (User Settings) in the instrument cluster and tick the check box.

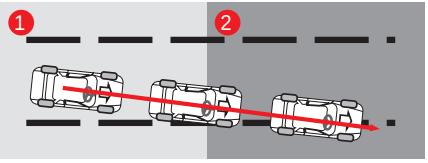
Operating conditions:

- Shift lever in P (park) or N (neutral) position
- Vehicle parked
- You are about to open the door to leave the vehicle when a vehicle is approaching from the rear side

If a vehicle approaching from the rear side is detected, a warning message is displayed on the instrument panel display along with a buzzer to inform the driver and the passenger.

LDW (Lane Departure Warning)*

The LDW is a driving assist system that its Front Camera Module (FCM) detects the lanes ahead and issues a warning message and sounds the warning buzzer to help the driver to drive the vehicle while maintaining the vehicle on the line properly when the vehicle deviates from the lane with the turn signal not activated.



1. Detect the deviation of the lane with the turn signal not activated
2. Display a warning message and sound the warning buzzer

Warning

- **The LDW prevents the lane departure, gives a warning to the driver and sounds the warning buzzer. Never depend on the lane departure warning system in any case and drive while checking the road condition.**

To activate / deactivate lane departure warning (LDW)

- Go to **Driving Assist → Front Safety Aid → LDW & LKA Setting → Enable LDW** in (User Settings) in the instrument cluster and tick the check box of Lane Departure Warning (LDW).

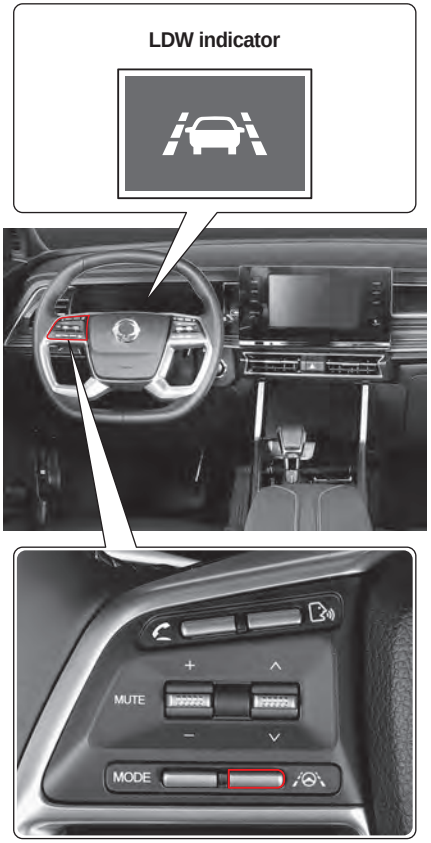
Turn the ignition switch to the “ON” position and press and hold the LKA setting button.

At this time, the lane departure warning (LDW) indicator will illuminate and LDW is activated regardless of the centering lane keeping assist (CLKA) settings.

While the lane departure warning (LDW) is activated, press and hold the button again to deactivate the function.

Notice

- **Depending on the instrument cluster setting, the Lane Departure Warning (LDW) or Lane Keeping Assistance (LKA) is always in standby mode.**



4

LDW ON indicator

When the lane departure warning system is activated, the indicator on the instrument cluster turns on.

- White indicator turns on: The lane departure warning system is in ready status (the vehicle speed is below a prescribed speed or the lane is not recognized).
- Green indicator turns on: The lane departure warning system is operating normally.
- Yellow warning light turns on/blinks: When the LDW is abnormal

Activation conditions

If the following conditions are met, the LDW is activated.

- When the LDW is set
- When the vehicle speed is between 40 kph and 175 kph
- When the front camera recognizes the left and right lanes
- A straight road or gently curved road

☞ Refer to “LKA (LDW) indicator / warning lamp*” (p.4-32)

Notice

- **Entry and release conditions depending on vehicle speed**
  - **Entry conditions: 40 kph or above, 175 kph or less**
  - **Release conditions: 35 kph or less, 185 kph or above**

Warning

- **Be sure to hold the steering wheel while driving.**
- **The driver is responsible for operating the steering wheel to ensure the safe driving of the vehicle.**
- **Do not steer the vehicle rapidly when the lane departure warning system is activated.**
- **The lane departure warning system only gives a warning and sounds the warning buzzer. Therefore, the driver should keep the vehicle in the lane by steering the vehicle carefully while driving.**
- **The lane departure warning system may be deactivated, may not operate or may operate unnecessarily according to road condition and surrounding environment. Therefore, pay attention while driving.**
- **Do not attempt dangerous driving for activating the lane departure warning system.**

Caution

- **Do not tint or attach a sticker or an accessory to the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate normally.**
- **The lane departure warning system recognizes a lane using the camera, and if the lane is not recognized properly, the system may be deactivated or may operate unnecessarily, so be careful when using the system.**
- **If the lane is not recognized properly, be sure to check the conditions for driver's attention.**
- **Do not detach any component from the LDW or apply an impact to the LDW.**
- **Do not place a reflecting object (white paper or mirror) on the dashboard. Doing so may cause the system to malfunction due to the reflection of light.**
- **The warning buzzer of the LDW may not be heard due to the loud sound from the audio system.**

Cases that the system is not activated

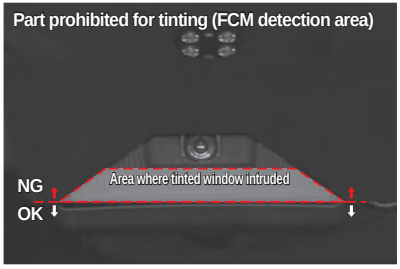
- When the turn signal and the hazard warning lamp are operated for changing the lane
- When both the left and right lanes are not recognized
- When the vehicle is driven on one side of the lane continuously without moving to the center of the lane after changing the lane
- If the steering wheel is operated suddenly for changing the lane (the system is not activated temporarily)
- When the Electronic stability control system (ESC) is activated
- When the vehicle is circling fast on a curved road
- When the vehicle speed is less than 40 kph and more than 175 kph
- When you need to change the lane rapidly
- When the width of the lane is too narrow or too wide so that the lane cannot be detected
- When there are 2 or more lane markings on the lane while driving (example: construction section)
- If the radius of a curved road is too small
- In case of a steep sloping road
- When the vehicle speed is reduced rapidly
- When the tinted part of the windshield covers a part of the Front Camera Module (FCM) detection range

Warning

- **Change the lane after operating the turn signal switch.**

Caution

- **Do not tint the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate.**



4

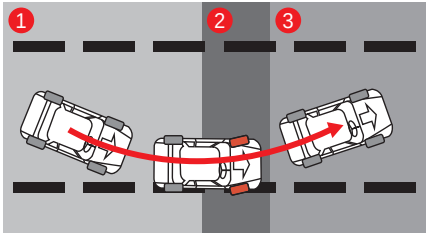
Cases requiring the driver's attention

In any of the following cases, the system may not operate or may operate unnecessarily. Therefore, the driver's attention is necessary.

- If the lanes are not visible due to foreign substances (rain, snow, dust, puddle, wet road surface)
- If the color of lane markings and the road cannot be distinguished clearly
- If the lane markings are not clear or are damaged or two or more lane markings are present on one side
- If there are markings other than or similar to the lane marking near the lane
- If the lane markings are covered in the shade of median strips, guardrails, noise barriers, other structures or roadside trees
- If there are boundary structures such as sidewalk blocks
- If the lane is crowded due to the construction section or some lanes are replaced with structures
- When the lane suddenly disappears or is invisible on the intersection
- There is a section where the number of lanes increases or decreases or the lanes intersect complicatedly (tollgate entrance, road junction/merge section, etc)
- If the lane is too narrow or too wide
- If the distance from a vehicle ahead is extremely short or a vehicle ahead is driving while hiding the lane
- There is a marking for a crosswalk or road sign on the road surface
- If the visibility is poor due to bad weather such as fog, heavy rain or heavy snow
- If the visibility is poor so that the lane cannot be recognized
- When the brightness outside the vehicle changes rapidly such as the entering a tunnel
- When the light is weak or the head light of the vehicle is not used at night or in a tunnel section
- When you drive the vehicle on the bus-only lane or on the left or right lane of the bus-only lane
- On a sharply curved section or a steeply sloping road
- when the vehicle wobbles significantly
- When a reflecting object (white paper or mirror, etc.) is placed on the dashboard
- When the windshield or the front side of the camera lens is contaminated with dust
- When the moisture formed on the glass of the windshield is not removed completely
- When the temperature near the camera is very high due to direct sunlight
- When there is backlight in the moving direction of the vehicle
- When the sunlight, streetlight or the light from an incoming vehicle is reflected by water on the road surface
- When front camera is arbitrarily refitted (Be sure to visit our authorized service center to perform the calibration of the front camera. Otherwise, it may cause the camera to malfunction.)

LKA (Lane Keeping Assistance)*

The LKA (Lane Keeping Assist) is an assistive vehicle operation technology that detects vehicles up ahead using the FCM (Front Camera Module), and when the system detects that the vehicle is departing from the current lane without a lane change indication, the vehicle visually and audibly warns the driver through the LDW (Lane Departure Warning), and if the vehicle continues to depart from the lane, the vehicle maintains stays in the current lane by taking control using the ESC system.



1. Lane departure without activation of turn signal lamp detected
2. Steering control by ESC as well as warning message and buzzer
3. The vehicle is steered toward the center of the lane.

Warning

- **The LKA assists the driver with audible and visual warnings so that the vehicle does not move out of the driving lane unintentionally. Do not drive the vehicle in a dangerous or reckless manner relying on the LKA. Always drive safely paying attention to the road conditions.**
- **The LKA is an assistive device that precisely controls the steering wheel so that the vehicle does not leave the lane regardless of the intention of the driver.**

To activate / deactivate lane keeping assistance (LKA)

- Go to **Driving Assist** → **Front Safety Aid** → **LDW & LKA Setting** → **Enable LKA** in (User Settings) in the instrument cluster and tick the check box of Lane Keeping Assist (LKA).

Turn the ignition switch to the “ON” position and press and hold the LKA setting button.

At this time, the lane keeping assistance (LKA) indicator will illuminate and LKA is activated regardless of the entering lane keeping assist (CLKA) settings.

While the lane keeping assistance (LKA) is activated, press and hold the button again to deactivate the function.

Notice

- **Depending on the instrument cluster setting, the Lane Departure Warning (LDW) or Lane Keeping Assistance (LKA) is always in standby mode.**

LKA ON indicator

This indicator light up on the instrument cluster when the LKA is activated.

- Indicator ON in white: System READY state (Vehicle speed below specified value or no lane detected)
- Indicator ON in green: LKA operates normally
- Indicator ON in yellow / flash: Faulty LKA system

Operating conditions

The LKA system is activated when:

- LKA is enabled
- Vehicle travels at a speed between 40 kph and 175 kph
- Front camera recognizes left/right lanes
- Driving on a straight road or gentle curve
- Turn signal is not activated

☞ Refer to “LKA (LDW) indicator / warning lamp*” (p.4-32)

Notice

- **Entry and release conditions depending on vehicle speed**
  - **Entry conditions: 40 kph or above, 175 kph or less**
  - **Release conditions: 35 kph or less, 180 kph or above**

Warning

- **Do not release your hands from the steering wheel while driving.**
- **The driver is responsible for safe driving of the vehicle by maneuvering the steering wheel.**
- **Do not steer the vehicle rapidly while the LKA is activated.**
- **The LKA does not always control the steering wheel automatically.**

Warning

- The LKA is only a device to assist with the steering wheel operation, and the driver is entirely responsible for maintaining the lane with the steering wheel operation.
- The LKA may be deactivated, not work at all, or activated when it is not desired depending on the road conditions and surrounding environment.
- Never drive the vehicle in a dangerous or reckless manner to test the LKA.
- When replacing the steering wheel system-relevant parts, have the system checked and serviced at a KG Mobility Dealer or KG Mobility Authorized Service Center.

Caution

- Do not attach sticker, accessory, tinting films on the detection area of the FCM. This can cause malfunctions and abnormal operation of the related systems.
- The LDW recognizes the lanes by using the images from the cameras. Keep in mind that the LDW may be deactivated or activated when it is not desired if the lanes are not recognized successfully.
- Pay close attention especially when the LKA fails to detect the lane markings.

Caution

- Do not remove any part of the LDW or apply impact on it.
- Do not put any object with reflective surface (white paper, mirror, etc.) on the instrument panel. Reflected lights can cause system malfunction.
- You may not hear the audible alert (chime) if the sound from your audio source is too loud.
- If you drive without holding the steering wheel for too long, LKA will be turned off automatically after the hands off alert.
- Please note that when driving at high speed, the steering assist force of the lane keeping assist system may be reduced, which can cause the vehicle to leave the lane.
- The driver is responsible for operating the steering wheel.
- The driver can still steer the vehicle in the event of the faulty LKA.
- Please operate the steering wheel by hand without using the LKA when:
  - Weather is bad
  - Road condition is not good
  - Frequent steering wheel control is required
- You may feel that the steering wheel is heavy or light when the LKA is not operating.

Cases that the system is not activated

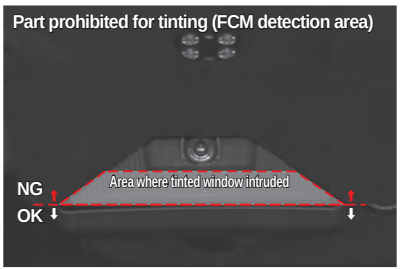
- When the turn signal and the hazard warning lamp are operated for changing the lane
- When both the left and right lanes are not recognized
- When the vehicle is driven on one side of the lane continuously without moving to the center of the lane after changing the lane
- If the steering wheel is operated suddenly for changing the lane (the system is not activated temporarily)
- When the Electronic stability control system (ESC) is activated
- When the vehicle is circling fast on a curved road
- When the vehicle speed is less than 40 kph and more than 180 kph
- When you need to change the lane rapidly
- When the width of the lane is too narrow or too wide so that the lane cannot be detected
- When there are 2 or more lane markings on the lane while driving (example: construction section)
- If the radius of a curved road is too small
- In case of a steep sloping road
- When the vehicle speed is reduced rapidly
- When the tinted part of the windshield covers a part of the Front Camera Module (FCM) detection range

Warning

- **Change the lane after operating the turn signal switch.**

Caution

- **Do not tint the Front Camera Module (FCM) detection area. Doing so may cause the relevant system to malfunction or not to operate.**



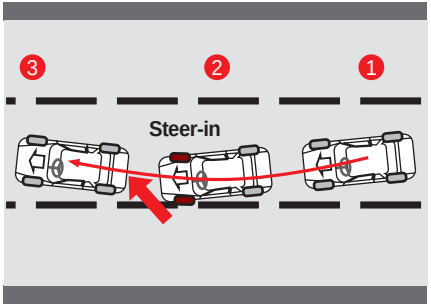
Cases requiring the driver's attention

In any of the following cases, the system may not operate or may operate unnecessarily. Therefore, the driver's attention is necessary.

- If the lanes are not visible due to foreign substances (rain, snow, dust, puddle, wet road surface)
- If the color of lane markings and the road cannot be distinguished clearly
- If the lane markings are not clear or are damaged or two or more lane markings are present on one side
- If there are markings other than or similar to the lane marking near the lane
- If the lane markings are covered in the shade of median strips, guardrails, noise barriers, other structures or roadside trees
- If there are boundary structures such as sidewalk blocks
- If the lane is crowded due to the construction section or some lanes are replaced with structures
- When the lane suddenly disappears or is invisible on the intersection
- There is a section where the number of lanes increases or decreases or the lanes intersect complicatedly (tollgate entrance, road junction/merge section, etc)
- If the lane is too narrow or too wide
- If the distance from a vehicle ahead is extremely short or a vehicle ahead is driving while hiding the lane
- There is a marking for a crosswalk or road sign on the road surface
- If the visibility is poor due to bad weather such as fog, heavy rain or heavy snow
- If the visibility is poor so that the lane cannot be recognized
- When the brightness outside the vehicle changes rapidly such as the entering a tunnel
- When the light is weak or the head light of the vehicle is not used at night or in a tunnel section
- When you drive the vehicle on the bus-only lane or on the left or right lane of the bus-only lane
- On a sharply curved section or a steeply sloping road
- when the vehicle wobbles significantly
- When a reflecting object (white paper or mirror, etc.) is placed on the dashboard
- When the windshield or the front side of the camera lens is contaminated with dust
- When the moisture formed on the glass of the windshield is not removed completely
- When the temperature near the camera is very high due to direct sunlight
- When there is backlight in the moving direction of the vehicle
- When the sunlight, streetlight or the light from an incoming vehicle is reflected by water on the road surface
- When front camera is arbitrarily refitted (Be sure to visit our authorized service center to perform the calibration of the front camera. Otherwise, it may cause the camera to malfunction.)

RKA-ROADEDGE (Lane Keeping Assist-Roadedge)

The RKA-ROADEDGE (Lane Keeping Assist-Roadedge) is a driving assistance system that helps the driver's vehicle maintain a Road-edge through the steering wheel (EPS) control if the front camera module (FCM) recognizes the left and right roads in front and the driver's vehicle departs the Road-edge without using a turn signal in that direction.



1. Road-edge departure detected with no turn signal operated
2. EPS steering control
3. Vehicle enters middle of driving road

Warning

- **RKA-ROADEDGE is an assist system to precisely control the steering wheel so that the driver's vehicle does not leave the Road-edge, regardless of the driver's intention.**

Activation / Deactivation

To activate ELK : Turn the ignition switch on.

To deactivate ELK : Please untick "ELK" in the User Settings on the instrument cluster.

Operating conditions

The RKA-Roadedge system is activated when:

- Vehicle travels at a speed between 60 km/h and 175 km/h
- Front camera recognizes left/right Road-edge
- Driving on a straight road or gentle curve
- Turn signal is not activated

Warning

- **Do not release your hands from the steering wheel while driving.**
- **The driver is responsible for safe driving of the vehicle by maneuvering the steering wheel.**
- **The RKA-Roadedge does not always control the steering wheel automatically.**

Warning

- **The RKA-Roadedge may be deactivated, not work at all, or activated when it is not desired depending on the road conditions and surrounding environment.**
- **Never drive the vehicle in a dangerous or reckless manner to test the RKA-Roadedge.**
- **When replacing the steering wheel system-relevant parts, have the system checked and serviced at a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Caution

- **Do not attach sticker, accessory, tinting films on the detection area of the FCM. This can cause malfunctions and abnormal operation of the related systems.**
- **The RKA-Roadedge recognizes the Road-edge by using the images from the cameras. Keep in mind that the RKA-Roadedge may be deactivated or activated when it is not desired if the Road-edge are not recognized successfully.**

Caution

- **Do not remove any part of the RKA-Roadedge or apply impact on it.**
- **Do not put any object with reflective surface (white paper, mirror, etc.) on the instrument panel. Reflected lights can cause system malfunction.**
- **Please note that when driving at high speed, the steering assist force of the RKA-Roadedge may be reduced, which can cause the vehicle to leave the Road-edge.**

Does not work when:

- The driver activates the turn signal lamps or hazard warning lamp.
- The vehicle keeps being driven too close to any side of the lane after changing the lane.
- The driver changes the lane with abrupt steering wheel operation. (temporarily system inactivated)
- ESP (Electronic Stability Program) system is activated.
- The vehicle is cornering at high speed.
- Vehicle speed is below 55 km/h or above 180 km/h
- The driver changes the lane abruptly.
- The lane is too narrow or too wide to recognize it.
- The vehicle is driven around a curve with too small radius.
- The vehicle is driven on steep hills.
- The vehicle decelerates abruptly.
- The windshield tinting film covers the detection range of the front camera module (FCM).

Warning

- **Activate the turn signal lamps before trying to make a lane-change.**

Caution

- **Do not apply tinting film on the FCM detection area. This may cause the related system to malfunction or not work.**

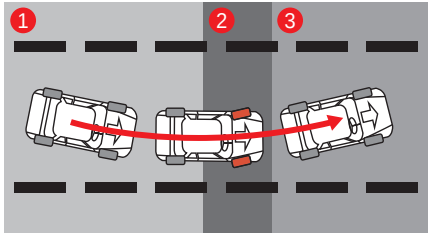
Driver Attention Required

The RKA-ROADEDGE may not work at all or be activated when it is not desired in the following conditions:

- The system cannot recognize the Road-edge markings because of rain, snow, dust, standing water or puddles, other obstruction on the road.
- The color of the Road-edge markings is not clearly distinct from the road color.
- The Road-edge markings are not clear.
- The Road-edge markings are covered in shadows of the median barriers, guardrails, noise barrier walls, roadside trees.
- There are environmental barriers, such as bollard.
- The Road-edge markings are suddenly discontinued at roundabouts and road intersections.
- The vehicle is passing through a certain section, such as highway interchange, where the number of lanes increases or decreases.
- The distance to the vehicle ahead is too short or a wheel of the vehicle ahead is touching the Road-edge marker.
- Poor visibility due to factors such as fog, heavy rain, heavy snow, etc.
- There is rapid change of illumination, for example at tunnel entry and exit points
- The headlamps are not turned on or the brightness of the lamps is too low when driving at night or through tunnels.
- The vehicle is driven on a steep hill or around sharp corners.
- The vehicle is driven under specific conditions which cause severe vibration.
- Objects with reflective surface (white paper, mirror, etc.) are on the dashboard.
- The windshield glass in front of the camera module is covered with ice, snow, slush, mud, dirt or debris.
- Fog or mist on the windshield.
- The temperature around the front view camera is too high because of the direct sunlight.
- The vehicle is moving towards a light source.
- The light from the sun, streetlamps, or headlamps of oncoming vehicles is reflected by the wet road surface.

Centering Lane Keeping Assist (CLKA)

The centering lane keeping assist is a driving aid that, once the front camera module (FCM) recognizes the lane ahead, helps the driver's vehicle stay on the road-edge through steering wheel (EPS) control.



1. Vehicle leaving center of lane detected
2. Steering control by EPS as well as warning message and buzzer
3. Controls vehicle to move to center of lane

Notice

- **To operate the centering lane keeping assist (CLKA), the driver must always press the LKA setting button briefly after turning the ignition switch to the ON position.**

Warning

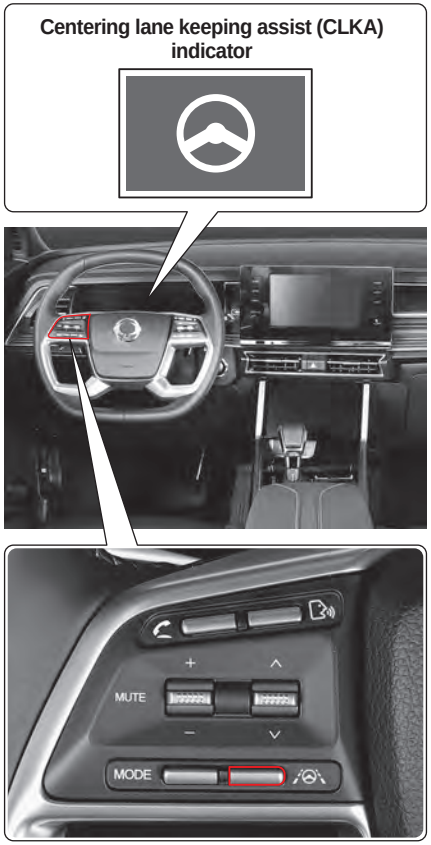
- **The centering lane keeping assist (CLKA) is the system that provides a visual and audible warning to the driver to keep the driver's vehicle between lanes (center). Do not drive the vehicle in a dangerous or reckless manner relying on the CLKA. Always drive safely paying attention to the road conditions.**
- **The CLKA is an assistive device that precisely controls the steering wheel so that the vehicle does not get out of the middle of the lane regardless of the driver's intention.**

To activate / deactivate CLKA

Turn the ignition switch to the "ON" position and press the LKA setting button briefly.

At this time, the centering lane keeping assist (CLKA) indicator will illuminate and CLKA is activated regardless of the lane departure warning (LDW) and lane keeping assistance (LKA) settings.

While the CLKA is activated, press the button briefly again to deactivate the function.



Centering lane keeping assist (CLKA) ON indicator lamp

- When the centering lane keeping assist (CLKA) is activated, the indicator illuminates on the instrument cluster.
- Indicator ON in white: CLKA standby mode (Vehicle speed below specified value or no lane detected)
- Indicator ON in green: CLKA normal operation
- Indicator ON in yellow / flash: In the event of faulty CLKA

Notice

- **For safe operation, turning the ignition switch to the OFF position cancels the setting of the centering lane keeping assist (CLKA). Press the button briefly to operate the CLKA.**
- **If intelligent cruise control (IACC) is activated during CLKA operation, CLKA will be disabled. If IACC is subsequently disabled, CLKA is automatically reactivated.**

Conditions for activation

CLKA will be activated when:

- LKA setting button is pressed briefly.
- Vehicle speed is 180 km/h or lower.
- Front camera recognizes left/right lanes.
- The vehicle is driving on a straight road or gentle curve.
- Turn signal is not activated.
- Turn signal on the opposite side of direction in which you are about to move is operated.

☞ Refer to “Centering lane keeping assist (CLKA) indicator / warning lamp” (p.4-33)

Warning

- **Do not release your hands from the steering wheel while driving.**
- **The driver is responsible for safe driving of the vehicle by maneuvering the steering wheel.**
- **Do not steer the vehicle unnecessarily rapidly while the CLKA is activated.**
- **The CLKA does not always provide the steering wheel control automatically.**
- **The CLKA is only a device to assist with the steering wheel operation, and the driver is entirely responsible for maintaining the lane with the steering wheel operation.**
- **The CLKA may be deactivated, not work at all, or activated when it is not desired depending on the road conditions and surrounding environment.**
- **Do not try to drive the vehicle in a dangerous or reckless manner to see how the CLKA is operated.**
- **When replacing the steering wheel system-relevant parts, have the system checked and serviced at a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Caution

- **Do not attach sticker, accessory, tinting films on the detection area of the FCM. This can cause malfunctions and abnormal operation of the related systems.**
- **The CLKA recognizes the lanes by using the images from the cameras. Keep in mind that the CLKA may be deactivated or perform unnecessary operations if the lanes are not recognized successfully.**
- **Pay close attention especially when the LKAS fails to detect the lane markings.**
- **Do not remove any part of the CLKA arbitrarily or apply impact on it.**
- **Do not put any object with reflective surface (white paper, mirror, etc.) on the instrument panel. Reflected lights can cause system malfunction.**
- **You may not hear the audible alert (chime) from CLKA if the sound from your audio source is too loud.**
- **If you drive without holding the steering wheel for too long, CLKA will be disabled automatically after the hands off alert.**

Caution

- **Please note that when driving at high speed, the steering assist force of the CLKA may be reduced, which can cause the vehicle to leave the lane.**
- **The driver is responsible for operating the steering wheel.**
- **The driver can still steer the vehicle in the event of the faulty CLKA.**
- **Please operate the steering wheel by hand without using the CLKA when:**
  - **Weather is bad**
  - **Road condition is not good**
  - **Frequent steering wheel control is required**
- **You may feel that the steering wheel is heavy or light under conditions in which CLKA does not assist steering wheel operation.**

The CLKA does not work when:

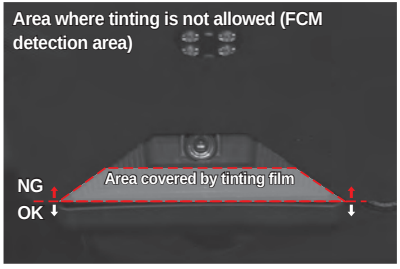
- The driver activates the turn signal lamps or hazard warning lamp.
- Both lanes are not detected.
- The vehicle keeps being driven too close to any side of the lane after changing the lane.
- The driver changes the lane with abrupt steering wheel operation. (temporarily system inactivated)
- Electronic stability control (ESC) is activated.
- The vehicle is cornering at high speed.
- Vehicle speed is below 40km/h or above 180 km/h
- The driver changes the lane abruptly.
- The lane is too narrow or too wide to recognize it.
- There are 2 or more lane markings (e.g. construction zone).
- The vehicle is driven around a curve with too small radius.
- The vehicle is driven on steep hills.
- The vehicle decelerates abruptly.
- The windshield tinting film covers the detection range of the front camera module (FCM).

Warning

- **Activate the turn signal lamps before trying to make a lane-change.**

Caution

- **Do not apply tinting film on the FCM detection area. This may cause the related system to malfunction or not work.**



Driver Attention Required

The CLKA may not work at all or be activated when it is not desired in the following conditions:

- The system cannot recognize the lane markings because of rain, snow, dust, standing water or puddles, other obstruction on the road.
- The color of the lane markings is not clearly distinct from the road color.
- The lane markings are not clear or tampered by the traffic, or there are 2 or more lane markings on one side.
- There are other markings similar to the lane markings on the roads.
- The lane markings are covered in shadows of the median barriers, guardrails, noise barrier walls, roadside trees.
- There are environmental barriers, such as bollard.
- The traffic is heavy due to the construction in the area or traffic control items, such as traffic cones, are used to separate traffic flows.
- The lane markings are suddenly discontinued at roundabouts and road intersections.
- The vehicle is passing through a certain section, such as highway interchange, where the number of lanes increases or decreases.
- The width of the driving lane is too narrow or wide.
- The distance to the vehicle ahead is too short or a wheel of the vehicle ahead is touching the lane marker.
- There are other roadway markings on the roads, such as crosswalk markings, arrows, symbols, along with the lane markings.
- Poor visibility due to factors such as fog, heavy rain, heavy snow, etc.
- Hard to recognize other vehicles and pedestrians because of poor visibility.
- There is rapid change of illumination, for example at tunnel entry and exit points
- The headlamps are not turned on or the brightness of the lamps is too low when driving at night or through tunnels.

- When you are traveling within or near the outer edges of the bus-only lane.
- The vehicle is driven on a steep hill or around sharp corners.
- the vehicle is driven under specific conditions which cause severe vibration.
- Objects with reflective surface (white paper, mirror, etc.) are on the dashboard.
- The windshield glass in front of the camera module is covered with ice, snow, slush, mud, dirt or debris.
- Fog or mist on the windshield.
- The temperature around the front view camera is too high because of the direct sunlight.
- The vehicle is moving towards a light source.
- The light from the sun, streetlamps, or headlamps of oncoming vehicles is reflected by the wet road surface.
- When front camera is arbitrarily refitted (Be sure to visit our authorized service center to perform the calibration of the front camera. Otherwise, it may cause the camera to malfunction.)

FVSW (Front Vehicle Start Warning)*

It is a system that notifies the driver when the driver does not recognize that the ahead vehicle departed while the driver's vehicle is stationary, using the sensor (FCM) at front of the vehicle.

FVSW : Front Vehicle Start Warning

How To Set

You can enable (check) or disable (uncheck) this feature under the instrument cluster main menu, "User Settings → Driving Assist → Front Safety Aid → Front Vehicle Start Warning" with the vehicle turned on.

Operation

If the driver does not perform any operation (such as not starting the vehicle) about 1 second after the ahead vehicle departs, the message will be displayed on the LCD and alarm will sound.

Caution

- **For safe driving, be sure to check the front and surrounding road conditions before starting the vehicle.**
- **The FVSW (Front Vehicle Start Warning) does not work in stop situations other than stop by the brake pedal, auto hold, or smart cruise control system.**
- **If you stop the vehicle with shift lever in N (neutral) position, it may not operate or may generate a false alarm.**
- **In an environment other than the normal driving situation (non-motorway / highway), it may generate a false alarm.**
- **The FVSW works only when the shift lever is in D (drive) or N (neutral) position.**
- **There may be a false alarm if you stop at a speed bump or ramp.**

Front/rear obstacle detection system

The front/rear obstacle detection system is a parking assist system that detects an obstacle through the ultrasonic sensor installed on the bumper and informs the driver with a warning buzzer when the driver places the gear shift lever in the D (driving) or the R (reverse) position and drives the vehicle.

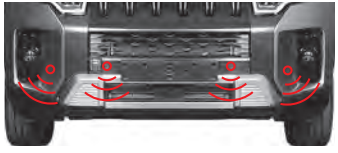
Display of the instrument cluster

The distance from the obstacle is displayed on the instrument cluster along with the warning buzzer.

You can turn on or off the front parking assist waring. Lightly touch the front parking assist warning ON/OFF switch to illuminate the front parking assist warning.

Front obstacle detection system ON/OFF switch

Front obstacle detection sensor



Right side Center Left side

- 4 front obstacle detection sensors
- Activated when moving forward or reversing
- Detects at the vehicle speed of approximately 15 km/h or less

- 4 rear obstacle detection sensors
- Activated only when reversing

Rear obstacle detection sensor

Left side Center Right side

Activating the obstacle detection system

D (driving) position	4 obstacle detection sensors

If the transmission selector lever is in the D (drive) position, the detection sensor operates when:

- Vehicle starts to move after initial start (at vehicle speed of 15 km/h or lower).
- Transmission selector lever is changed from R (reverse) position to D (drive) position (at vehicle speed of 15 km/h or lower).
- Front obstacle detection warning switch is turned on (at vehicle speed of 15 km/h or lower).

  However, it will remain off after the vehicle speed exceeds 15 km/h.

R (reverse) position	6 obstacle detection sensors

When the gear shift lever is placed in the R (reverse) position, 2 front obstacle detection sensors and 4 rear obstacle detection sensors are activated at the same time.

Notice

- **Even if the front parking assist warning ON/OFF switch in the OFF position (indicator off), the front obstacle detection sensor operates when reversing the vehicle.**
- **An alarm may sound intermittently in the event of rain and this is not a malfunction but normal operation.**

Indication on the display of the instrument cluster

When an obstacle is detected, the relevant edge indicating the detection distance and direction blinks.

Display of the instrument cluster	
D (driving) position	R (reverse) position
	

When no obstacle is detected

The range of front and rear sensors is displayed and blinks (no warning buzzer)

If an obstacle is detected from 40 cm at the front left side or the front right side

Line No. 1 at the front left side is deleted and Line No. 2 blinks (Warning buzzer sounds)

If an obstacle is detected from 80 cm at the rear left side, front side or right side

Line No. 3 at the rear right side is deleted and Line No. 4 blinks (Warning buzzer sounds)

Warning buzzer interval

The warning buzzer sounds as follows depending on the distance from the obstacle.

Front obstacle detection sensor (level 2 warning buzzer)

Warning buzzer interval	Distance from the obstacle	
	Center	Side
No warning buzzer	100 cm	60 cm
1 0.15 second	50 cm ~ 100 cm	40 cm ~ 60 cm
2 Continuous	25 cm ~ 50 cm	25 cm ~ 40 cm

Rear obstacle detection sensor (Level 3 warning buzzer)

Warning buzzer interval	Distance from the obstacle	
	Center	Side
3 0.3 second	80 cm ~ 120 cm	-
4 0.15 second	50 cm ~ 80 cm	
5 Continuous	25 cm ~ 50 cm	

Sensor and relevant system malfunction

Display of the instrument cluster	
D (driving) position	R (reverse) position
	

When the obstacle detection sensor is abnormal, “?” is displayed for the relevant sensor. If this message is display on the display of the instrument cluster, have your vehicle checked and serviced at a nearby KG Mobility Authorized Service Center.

Caution

- **If the distance between the sensor and the obstacle is 25 cm or less, the warning buzzer does not sound. However, if the obstacle is recognized clearly, the warning buzzer may sound.**
- **When the warning buzzer sounds, the distance from the obstacle may be different from the actual distance by approximately ± 10 cm.**
- **Do not rely too much on the parking assist system and reverse the vehicle while checking the rear side.**
- **If an abnormal warning buzzer whose duration is different from a warning buzzer that occurs due to the detection of an obstacle or a long warning buzzer for 3 seconds occur when the gear shift lever is placed in the R (reverse) position, the obstacle detection system or the detection sensor is abnormal. Have your vehicle checked.**

If the system does not operate or malfunctions

If there is an object that cannot be detected by the sensor

- A thin object such as steel wire, rope or chain
- An object such as cotton, sponge, fiber or snow that absorbs sound waves
- An object that is located lower than the bumper (example : drainage or puddle)

The sensor cannot detect

- when the sensor is frozen (the normal function is restored after thawed.)
- When sensor is clogged by foreign materials such as snow, mud or water drops (the normal function is restored after removed)

When the sensor detection range becomes narrower

- The sensor is partially covered with snow or mud so that the signal detection area becomes narrower (the normal function is restored after removal)
- When the temperature near the sensor is extremely high or low

Cases that may cause malfunction although it is not a system failure

- Driving the vehicle on bumpy roads, gravel roads, hillside road, or grass
- When the height of the bumper is lowered due to heavy load
- When other ultrasound waves are received (metallic sound, air brake sound of a large vehicle, etc)
- When a high-power radio set is used
- When there is a heavy rain
- When an accessory is attached to or near the area where the sensor is installed

When towing a trailer

- The sensor may detect the trailer, sounding the warning buzzer continuously.

Cautions regarding the front/rear obstacle detection system

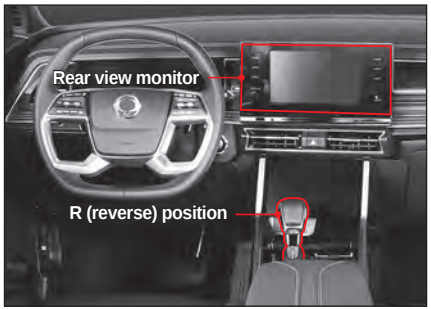
Caution

- **When parking or reversing the vehicle, check if there is any person, animal or especially a child around. If you cannot check it properly, be sure to get out of the vehicle and check.**
- **The parking assist system is only a system for the user's convenience and this system does not guarantee safety. The driver should pay attention to all possible conditions.**
- **When you strongly press or apply an impact to the sensor part on the bumper or strong water pressure is applied during car wash, the sensor may be damaged.**
- **When the system is normal and the gear shift lever is placed in the R (reverse) position with the START/STOP switch in the ON status, a beep sounds once briefly.**
- **If an abnormal warning buzzer whose duration is different from a warning buzzer that occurs due to the detection of an obstacle or a long warning buzzer for 3 seconds occur when the gear shift lever is placed in the R (reverse) position, the obstacle detection system or the detection sensor is abnormal. Have your vehicle checked.**

- **In the parking space shown in the figure below, the upper portion of the vehicle may collide before the detection sensor at the bottom operates. Park the vehicle while checking through the outside rearview mirror or turning your head directly.**

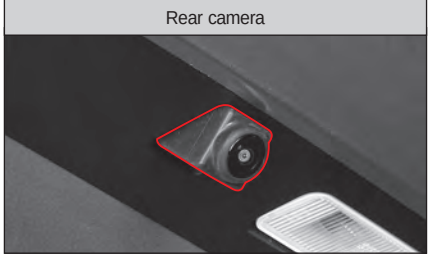
Rear camera system

The rear camera system is an auxiliary safety system that allows the driver to view the situation behind the vehicle through the rear camera using the monitor when the gear shift lever is placed in the R (reverse) position.



Rear view monitor

Rear camera



Caution

- **The rear camera uses a wide-angle lens to secure a wide view, so the actual distance is different from what you see through the monitor. Be sure to check the rear, left and right view directly.**
- **The screen shown on the monitor is a part of, not the whole background view of the vehicle.**
- **Clean the rear camera lens frequently using a camera lens cleaner to prevent it from being contaminated.**

Warning

- **The rear camera screen does not work during software update. Always stop the vehicle to update the software and do not drive the vehicle until the update is completed.**
- **Be careful when reversing since the rear obstacle may be hidden by the warning messages and parking guide lines if the rear camera system is activated.**

Vehicles With EPB

Since double parking (2-row parking) is required due to insufficient parking space, operate as follows.

1 With the START/STOP switch in the ON status or while the engine is running, release the Electronic Parking Brake (EPB).

Notice

- **If the AUTO HOLD function is activated, the EPB is activated automatically. Be sure to deactivate the function by pressing the AUTO HOLD switch before carrying out the process.**

2 Depress the brake pedal, place the gear shift lever in the P (parking) position and turn off the engine.

Notice

- **When the gear shift lever is placed in a position other than the P (parking) position, the engine cannot be turned off.**

3 Depress the brake pedal, press the unlock button and move the gear shift lever to the N (neutral) position. (Press the knob button when moving the shift lever.)

Warning

- **Be sure to carry out double parking (2-row parking) on completely flat ground and take a separate measure such as placing a chock on the wheels. Failure to do so may cause the vehicle to move, that is very dangerous.**

5. Emergency Measures in the Event of Emergency

You can check useful information and emergency measures for various emergency situations you can face while driving.

Information regarding the warning triangle and OVM tools, the correct procedurein case of a dead battery, engine overheating, flat tire, and towing a vehicle is provided. An explanation is also provided for how to respond to a fire, heavy snow, vehicle trouble, and an accident safely.

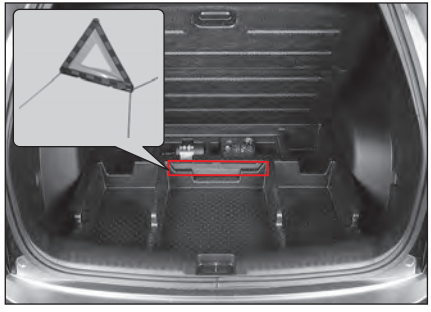
Warning triangle and OVM (Owner Vehicle Maintenance) tools

Warning triangle

A warning triangle is a stop sign that should be placed in the rear side of the vehicle in order to prevent any secondary accidents in the event of emergency such as car trouble or the occurrence of an accident.

Carrying and placement of a warning triangle is mandatory by the Road Traffic Act. A fine is imposed if you violate it.

Storage place of the warning triangle*



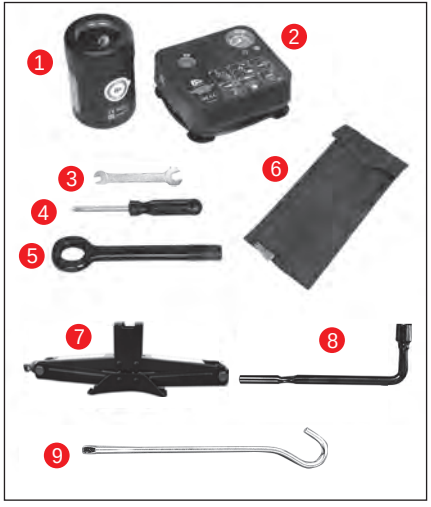
The warning triangle is stored at the bottom of the luggage board.

Caution

- **The KS standard automotive warning triangle (sign of broken down vehicle) should be stored in the vehicle according to the Road Traffic Act. Failure to do so is subject to a fine.**
- **While paying particular attention to surrounding traffic conditions, place the warning triangle in a position where its reflecting plate can be clearly visible to vehicles approaching from the rear.**
- **Place a road flare in addition to the warning triangle at night.**
- **If your vehicle becomes operational again or the problem is fixed, move the vehicle promptly while paying particular attention to the traffic conditions.**

OVM tools

The OVM tools are apparatuses or tools stored in the vehicle in preparation for a failure or an emergency situation that can occur while driving the vehicle.



1. Sealant (Emergency sealing compound in case of a flat tire)
2. Compressor (managing the tire pressure and injecting sealant in case of a flat tire)
3. Spanner
4. Screwdriver (+ and -)
5. Vehicle towing hook
6. Tool roll pouch
7. Jack
8. Wheel nut wrench
9. Jack connection

- Service kit: 1, 2, 3, 4, 5, 6
- Spare tire: 3, 4, 5, 6, 7, 8, 9
- Non spare tire: 3, 4, 5, 6

※ CE, UKCA certified parts: Compressor (2), Jack (7)

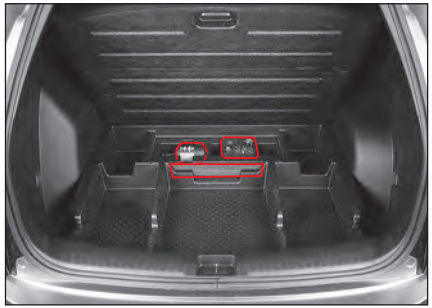
(1) CE

- Representative: KG Mobility European Parts Center B.V.
- Address: IABC 5253&5254, 4814RD Breda, The Netherlands

(2) UKCA

- Importer: KG Mobility UK Ltd
- Address: G Offices, Parsonage Road, Stratton St. Margaret, Swindon, Wiltshire SN3 4RN

Location where the OVM tools are stored



The OVM tools are stored in the storage box at the rear left side of the luggage compartment.

Take out and use the OVM tools any time when necessary.

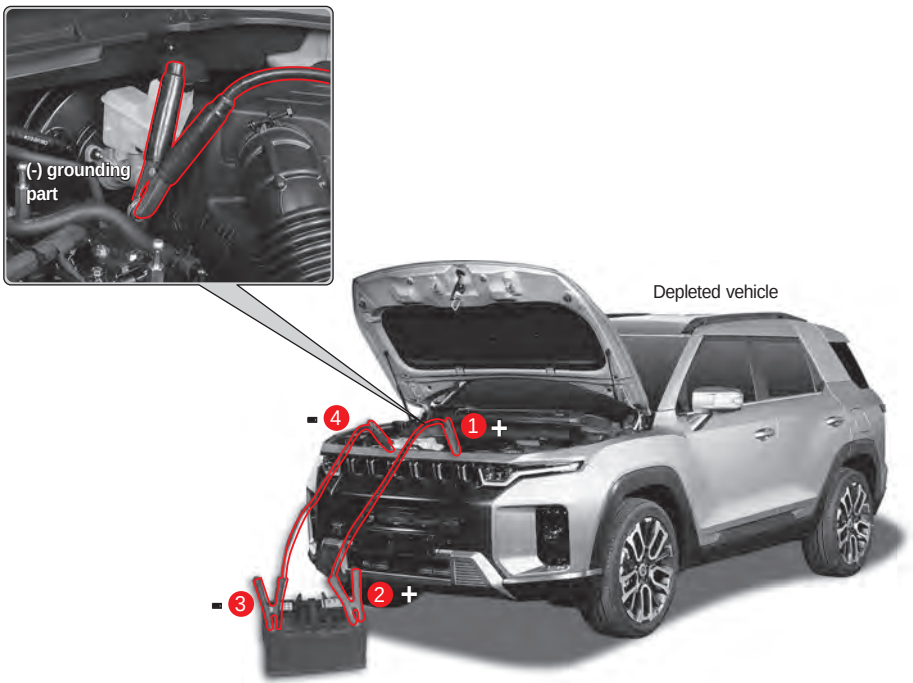
When the engine cannot be started due to depletion of the battery

If the engine cannot be started due to depletion of the battery, you can start the engine by connecting a battery of the same standard and capacity from another vehicle or an auxiliary battery to your battery using the jump cable.

Starting the engine using the jump cable

Move another vehicle that has the same 12 V power or an auxiliary battery closely to the depleted battery that can be reached by the jump cable and start the engine according to the following order.

1. Switch off all electrical accessories of the depleted vehicle.
2. Place the gear shift lever of the depleted vehicle in the P (parking) position and apply the parking brake.
3. Connect the jump cable in the following order.
   - + terminal (1) of the depleted battery
   - + terminal (2) of the battery in another vehicle or an auxiliary battery that provides power supply
   - - terminal (3) of the battery in another vehicle or an auxiliary battery that provides power supply
   - Vehicle body of the depleted vehicle (4) (a location far from the battery)
4. If the battery of another vehicle is used, start the engine of the relevant vehicle and idle the engine for several minutes.
5. Start the engine of the depleted vehicle.
6. When the engine is started, separate the jump cable in the following order.
   - Jump cable connected to the minus (–) terminal
   - Jump cable connected to the positive (+) terminal



Warning

- Follow the procedure to start the engine using the jump cable explained in this owner's manual. Failure to do so may cause an injury or damage the vehicle due to a battery explosion.
- If the battery is frozen, do not attempt to start the engine using the jump cable. Doing so may lead the battery to burst or explode, causing serious injury.
- Be sure to wear insulated gloves for starting the engine using the jump cable to prevent an electric shock.
- Make sure that two vehicles do not come into contact with each other. Failure to do so may result in ground connection status, causing an electric shock and a vehicle failure.
- Be sure to use the jump cable of the specified standard and a battery of the same standard and capacity. Failure to do so may cause a spark when the jump cables are connected and gas generated from the battery may explode.
- When using the battery of another vehicle, connect the jump cable with the engine of the other vehicle turned off for safety.

- When connecting the jump cables, make sure that the positive (+) and negative (-) cables do not comeinto contact with each other. Otherwise, an electric spark may occur, resulting in the explosion of the battery.
- Do not connect the jump cable to the negative (-) terminal of the depleted battery directly. Otherwise, an electric spark may occur, resulting in the explosion of the battery. Be sure to connect the jump cable to the vehicle body of the depleted vehicle.
- Make sure that the jump cables are securely fixed to each terminal. Failure to do so may cause disconnection due to an instantaneous vibration when the engine is started. If the jump cable is separated and comes into contact with the vehicle body,an electric shock may be applied to the vehicle, damaging electric and electronic components.
- The battery fluid is very acidic, so If it comes into contact with your eyes or on your skin, take off the clothes that are stained with the battery fluid immediately, rinse the contacted area with clean water continuously and contact your doctor. While being transported to a hospital, gently wipe the contacted area with a water-wet soft cloth or sponge continuously.

Caution

- Make sure when starting the engine that the jump cable is not wound around the fan in the engine room.
- After starting the engine using the jump cable, do not turn off the engine for a certain period of time to allow the depleted battery to be recharged. Otherwise, you may not be able to start the engine again according to the charging status of the battery.
- If the cause of the depleted battery is not clear, have your vehicle checked at a KG Mobility Authorized Service Center.

When the engine is overheated so that the warning light turns on

When the engine is overheated, various symptoms appear such as the warning light turns on and steam comes out from the engine.

In such case, park your vehicle at a safe place immediately and take the necessary action.

Symptoms that appear when the engine is overheated

- The engine overheat warning lamp blinks and the warning buzzer sounds.
- The coolant temperature gauge indicates the H part.
- Steam comes out from the engine.
- A decrease in the engine output

Emergency measures when the engine is overheated

Place the warning triangle at the rear side of the vehicle, evacuate all occupants to a safe place, check for safety again if necessary and take emergency measures according to the following procedure.

1 Place the gear shift lever in the P (parking) position and apply the parking brake.

2 Turn off the heater and the air conditioner.

3 Open the engine hood so that the engine room can be well ventilated.

At this time, if steam comes out of the engine, turn off the engine immediately.

If steam does not come out, idle the engine continuously with the engine hood opened.

If the coolant temperature gauge does not go down while the engine is idling, turn off the engine and let it cool down properly.

4 Check the coolant level on the coolant reservoir.

If the coolant level is low, add coolant and check if a leak occurs from the connecting part of each hose and the radiator.

Cover the reservoir cap with a cloth, turn it a little bit to release steam pressure, remove the cap and add the coolant. Close the reservoir cap after adding the coolant.

If the engine is overheated when the coolant level is normal, have the cooling systems (including the electric fan) and belts checked and serviced at a KG Mobility Authorized Service Center.

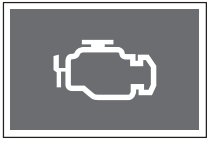
Warning

- **Caution should be taken that hot steam or coolant may come out when you open the engine hood.**
- **Be careful not to allow your clothes or hands to come into contact with the driving parts (belts, etc.) of the engine when you open the engine hood while the engine is running.**
- **Do not open the coolant reservoir cap rapidly when the engine is hot. Hot steam or water may come out, causing a burn. Be sure to open the coolant reservoir cap slowly after the engine is turned off and the engine has been cooled down properly.**

Caution

- **If the engine is overheated with insufficient coolant, turn off the engine immediately, cool down the engine and add coolant.**
- **Do not add cold coolant suddenly when the engine is overheated. Doing so may damage the engine or the radiator.**
- **Only use the KG Mobility genuine coolant that meets the standard.**
- **If the engine is overheated continuously after taking the emergency measures, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

When the engine check indicator turns on



The engine check indicator turns on when various sensors (including automatic transmission) and equipment related to the engine control are abnormal.

If the engine check indicator turns on while driving, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.

Caution

- **If the engine check indicator turns on, the driving power of the engine may decrease or the engine may stall.**

When a tire is flat

If a tire becomes flat while driving, do not panic and take action according to the following order.

1. Turn on the hazard warning lamp indicator.
2. Stop the vehicle at a safe place.

   For such purpose, hold the steering wheel firmly, take your foot off the accelerator pedal, decelerate the vehicle slowly and depress the brake pedal slightly to stop the vehicle safely.
3. Place the gear shift lever in the P (parking) position and apply the parking brake.
4. Place a chock in front of and at the back of the tires located in the diagonal direction of the flat tire.
5. Be sure to place the warning triangle on a road or an expressway where other vehicles are driving.

   The position that is easily identified by a driver in an approaching vehicle while maintaining a safe distance (100 m during daytime, 200 m in the rear during night time) is an appropriate place to place the warning triangle.
6. If there are other occupants besides the driver, evacuate such occupants to a safe place.
7. Judge if the flat tire can be repaired using the service kit for tire repair (stored in the storage box of the luggage compartment) and take the necessary action accordingly.

Warning

- **If a tire becomes flat while driving, do not steer the vehicle or depress the brake suddenly. Doing so may cause the vehicle to lose its stability, leading to an accident.**
- **Do not drive the vehicle for even a short distance with a flat tire. Doing so may damage the wheels and disable normal driving, leading to a dangerous situation.**
- **Turn on the hazard warning lamp indicator, move the vehicle to the shoulder of the road or a safe location and place the warning triangle in a place easily identified by a driver in an approaching vehicle.**
- **If possible, park the vehicle on a flat, solid, and non-slippery road surface and repair the tire with no occupants in the vehicle.**

Notice

- **If you are not good at repairing a flat tire, request a KG Mobility Authorized Service Center or your auto insurance company for help.**

Repairing a flat tire/inflating a tire using the service kit for tire repair

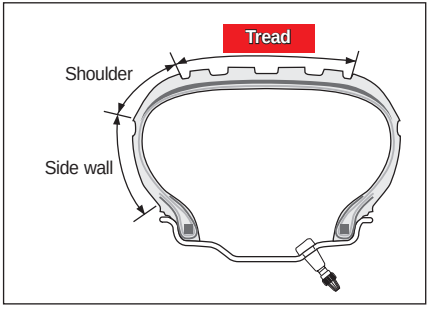
Components of the service kit for tire repair*

1. Sealant filler hose
2. Sealant
3. Air injection hose
4. Sealant removal button
5. Sealant mounting
6. Pressure gauge
7. Positive (+) cable
8. Negative (-) cable
9. Power switch
10. Deflating button

Storage location of the service kit

The service kit for tire repair is stored in the storage box at the rear left side of the luggage compartment with the OVM tools.

Confirming whether it is possible to repair the flat tire with the service kit or not



When a tire is flat, check the position of the hole first and use the service kit after judging whether it can be repaired using the service kit or not.

- If the size of the hole on the tread of the tire is less than 6 mm, it can be repaired using the service kit.

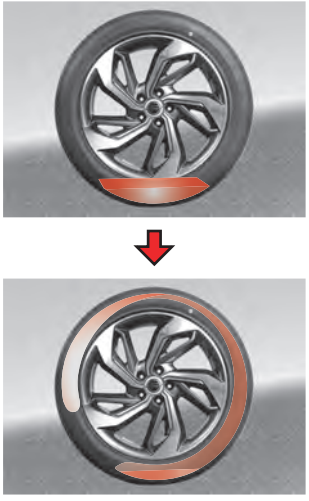
Warning

- **Do not repair the tire using the service kit if the tire shoulder or the side wallis torn or there is a sign of cracks or damage. In such case, have the tire checked and serviced at a KG Mobility Authorized Service Center or contact your car insurance company.**

5

Operating principle of the service kit

When the vehicle is driven after the sealant is injected using the compressor, the sealant is spread on the inner surface of the tire, filling up the hole and enabling temporary driving.



Repairing a flat tire

When a tire is flat, it can be repaired in the following method using the service kit.

1 Take out the tire repair service kit from the bottom of the luggage compartment board.

2 Remove the speed limit sticker on the side of the sealant container and attach it to the steering wheel.

Caution

- **The speed limit sticker alerts the driver that the tire has been repaired using the service kit and the speed should be limited. Do not drive the vehicle at a speed faster than 110 km/h at any time.**

3 Take out the sealant filler hose at the top of the sealant container.

Caution

- **Check the expiration date of the sealant. The expiration date is marked on top of the sealant. Replace expired sealant with a new one since the sealing performance of the expired sealant may be degraded.**
- **Be sure to read the cautions on the container before using the sealant.**

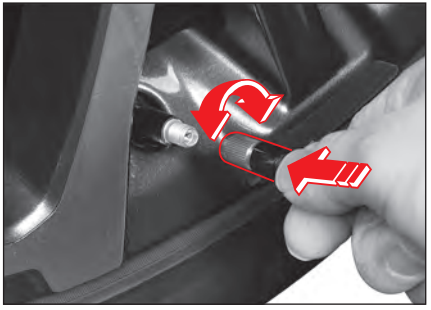
Notice

- **Before using the sealant, shake the container well to mix the contents.**

4 Fix the sealant container onto the compressor body completely.

5 Remove the air valve cap of the flat tire.

6 Connect the sealant filler hose which you took out at the sealant container to the air valve of the flat tire firmly.

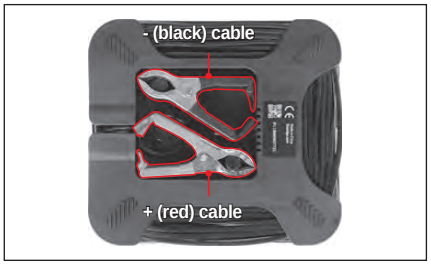


Caution

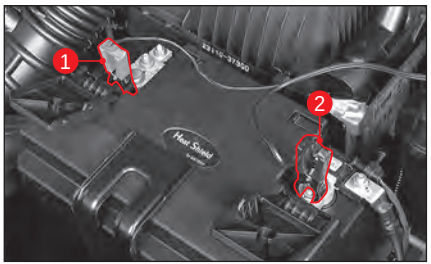
- **The power switch of the service kit should be in the OFF position.**

5

7 Take out the + (red) / - (black) cables at the bottom of the compressor.



8 Connect the + (red) (1) cable of the service kit to the vehicle battery and then connect the - (black) (2) cable.



Warning

- **Use caution when connecting the cables. Sparks may occur.**

Caution

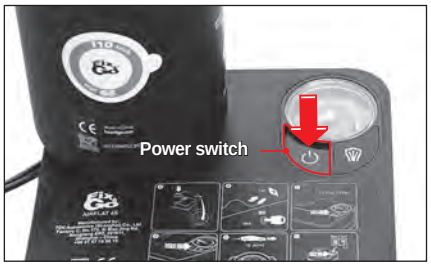
- **Connecting the positive (+) and negative (-) terminals of the battery in reverse may result in damage to the battery and the tire service kit. Be sure to connect the cables in the correct order.**
- **Be sure to start with removing the negative (-) terminal (black cable) when disconnecting the cables.**

9 Start the engine.

Warning

- **Be sure to repair a tire in a well-ventilated area. Failure to do so may leadto suffocation due to exhaust gas after starting the engine.**

10 Press the power switch of the service kit to activate the compressor.



Caution

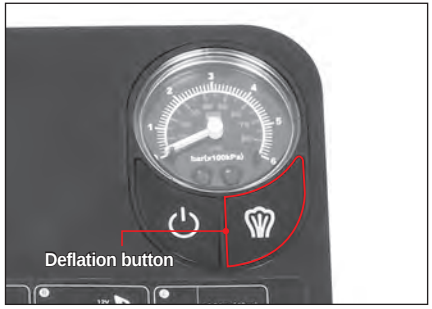
- **Do not operate the compressor for more than 10 minutes. Doing so may overheat the compressor, leading to a malfunction.**

11 Wait until the pressure reaches the prescribed pressure (34psi, 2.3bar) while checking the pressure gauge of the service kit.

Warning

- **If the specified tire pressure is not reached within 8 minutes (however, current tire pressure has reached at least 26 psi), re-inflate the tire as described below:**
  1. **Stop using the service kit and remove the sealant from the compressor.**
  2. **Place the service kit back in place (bottom of the luggage compartment board).**
  3. **Drive the vehicle at low speed for about 10 m so that the sealant is applied on the inner surface of the tire evenly.**
  4. **Fit the air injection hose at the compressor to the flat tire.**
  5. **Connect the power cable at the bottom of the compressor to the vehicle battery.**
  6. **Start the engine to operate the compressor.**
  7. **Operate the compressor until the tire pressure reaches to the specified value (34 psi, 2.3 bar).**

If the tire is overinflated, press the air pressure release button to adjust the tire pressure.



12 When the prescribed pressure is reached, turn off the service kit.

Caution

- **If the tire pressure does not go above 26psi after operating the compressor for more than 10 minutes, the tire cannot be repaired using the service kit. Request an emergency rescue service or vehicle towing.**

13 Disconnect the air hose from the tire.

14 Install the air valve cap on the tire.

15 Turn off the engine.

16 Remove the sealant container and the air hose from the service kit and place the service kit back to its original position (bottom of luggage compartment board).

17 Drive the vehicle immediately for approximately 10 km to allow the sealant to be spread on the inner surface of the tire evenly.

18 Stop the ve hicle at a safe place and measure the tire pressure with the service kit.

Warning

- **Use the service kit only when a small hole (approximately 6 mm or less) has occurred on the tread of the tire.**
- **Do not use the service kit if the tire shoulder or side wall is torn or the hole is too large. In such case, have your vehicle towed or serviced at a KG Mobility Authorized Service Center.**
- **When a tire repaired using the service kit is fixed, drive the vehicle at a speed less than 80 km/h.**
- **The service kit should be used only for temporary repair. The maximum distance that can be traveled with a tire repaired by injecting sealant is approximately 200 km.**
- **If a vibration occurs or the steering is unstable and a noise occurs while driving, stop driving the vehicle immediately. In such case, have your vehicle serviced at a KG Mobility Authorized Service Center.**

Caution

- **Remove the sealant container carefully to prevent the sealant from coming into contact with your skin. If sealant comes into contact with your skin, wash it with soapy water.**
- **The sealant container cannot be used after it is used once. Just in case, purchase and replace with new sealant.**
- **Do not discard the used sealant container anywhere. Return it to a KG Mobility Authorized Service Center.**
- **Do not use an unauthorized sealant which is not KG Mobility genuine sealant. Doing so may damage the sensor of the TPMS.**
- **Replace the tire repaired using the sealant with a new one at a KG Mobility Authorized Service Center as soon as possible and have the TPMS checked for abnormality.**

☞ **Refer to "Tire pressure monitoring system (TPMS)*" (p.2-29)**

Checking the tire treasure after repairing a flat tire

The pressure of the tire repaired using the service kit should be checked as follows after driving for approximately 10 km.

1. Take out the tire repair service kit from the bottom of the luggage compartment board.
2. Take out the air hose from the service kit.
3. Remove the air valve cap of the tire.
4. Connect the air hose of the service kit to the air valve on the tire firmly.
5. Check the tire pressure from the pressure gauge of the service kit.

   If the tire pressure is higher or lower than the prescribed pressure (34psi, 2.3bar), adjust it to the prescribed pressure using the air valve of the tire.

Warning

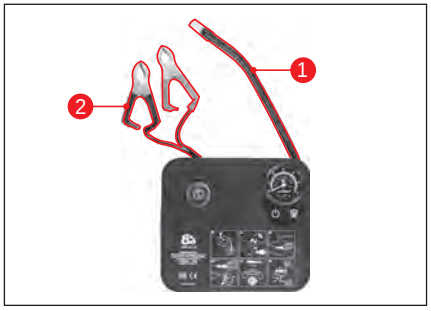
- **If the tire pressure is not maintained at the prescribed pressure (34psi, 2.3bar), stop driving the vehicle immediately and request a KG Mobility authorized service for help.**

Inflating a tire

When the tire pressure is insufficient, you can inflate the tire to the prescribed pressure with the following method using the service kit.

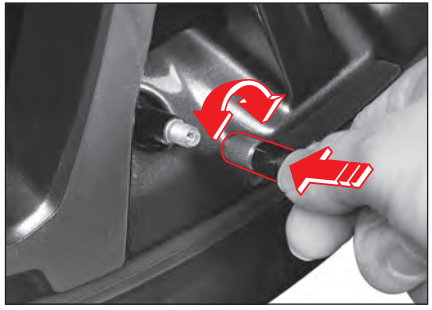
1 Take out the tire repair service kit from the bottom of the luggage compartment board.

2 Take out the air hose (1) and the power cable (2) from the service kit.



3 Remove the air valve cap of the tire you wish to inflate.

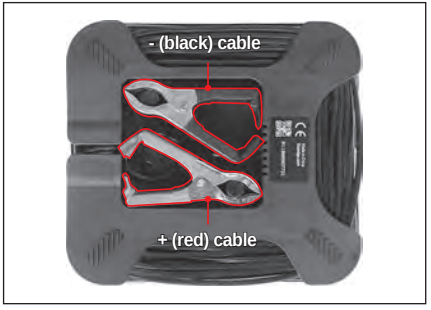
4 Connect the air hose of the service kit to the air valve on the tire firmly.



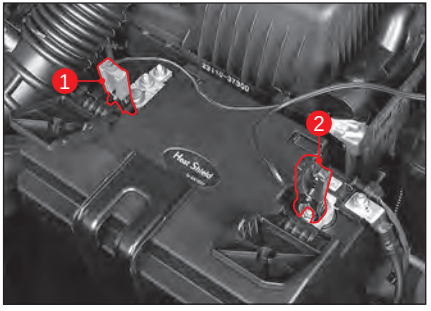
Caution

- **The power switch of the service kit should be in the OFF position.**

5 Take out the + (red) / - (black) cables at the bottom of the compressor.



6 Connect the + (red) (1) cable of the service kit to the vehicle battery and then connect the - (black) (2) cable.



5

7 Start the engine.

Warning

- **Be sure to repair a tire in a well-ventilated area. Failure to do so may leadto suffocation due to exhaust gas after starting the engine.**

8 Press the power switch (1) of the service kit to activate the compressor.

9 Wait until the pressure reaches the prescribed pressure (34psi, 2.3bar) while checking the pressure gauge (2) of the service kit.

If the tire is overinflated, press the air pressure release button to adjust the tire pressure.

10 When the prescribed pressure is reached, press the power switch (1) of the service kit to turn it off.

Caution

- **Do not operate the compressor for more than 10 minutes. Doing so may overheat the compressor, leading to a malfunction.**

11 Turn off the engine.

12 Disconnect the air hose from the tire.

13 Install the air valve cap on the tire.

14 Place the service kit back to its original position (storage box at the rear left side of the luggage compartment).

Removing the spare tire (Temporary)*

Open the cover in luggage compartment and remove the spare tire.

Caution

- When reinstalling the spare tire to the carrier, be sure to securely lock it to the carrier holder.
- While your vehicle is being raised up with the jack, avoid any impact on your vehicle. Otherwise, you may get injured.

Warning

- The emergency spare tire is only for emergency situations. Never use it for normal driving. After installing the spare tire on a wheel, take your vehicle to a KG Mobility Authorized Service Center or a tire-specialized shop to replace it with a new regular tire.

Changing a spare tire (Temporary)

1 Chock the front and rear of the wheel diagonally opposite to the wheel being changed.

Warning

- The parking brake should always be applied when replacing the flat tire.

2 Loosen the wheel nuts two or three turns by turning them counterclockwise with the wheel nut wrench.

Caution

- When reinstalling the wheel cap, be sure to completely fit it into its location.

Warning

- Do not remove the nuts yet from the wheel. If they are removed, the wheel could slip off from the vehicle. Then, the body of the vehicle will fall down on you and you may get seriously injured.
- Loosen the wheel nuts two or three turns.
- The parking brake should always be applied when replacing the flat tire.
- yy Chock the front and rear of the wheel opposite to the wheel being changed.

When replacing a front tire

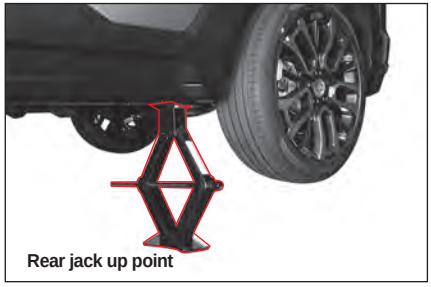
Front jack up point

3 Place the jack directly under the jack-up points so that the top of the jack contacts the vehicle at the jack-up point.

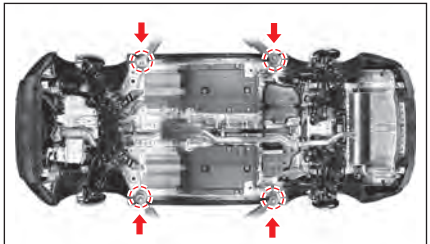
Warning

- **The jack should be used on level firm ground wherever possible.**
- **It is recommended that the wheels of the vehicle be chocked, and that no person should remain in a vehicle that is being jacked.**
- **No person should place any portion of their body under a vehicle that is supported by a jack.**
- **Jack working load limit 1,300 kg.**

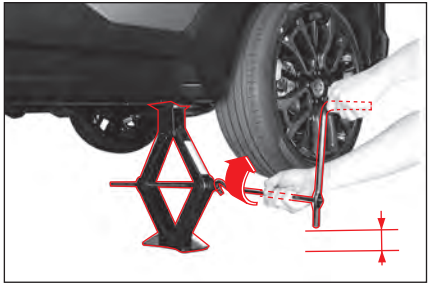
When replacing a rear tire



Rear jack up point



<Jack up points>

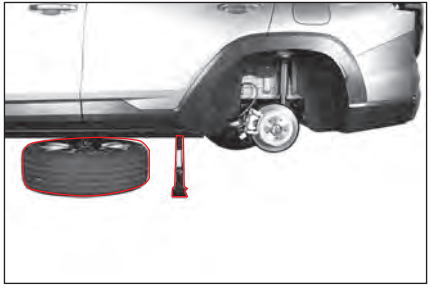


4 Combine the jack, jack extension and the wheel nut wrench as shown in the figure. Raise up the vehicle by rotating the combined wrench clockwise until the tire is off from the ground about 3 cm.

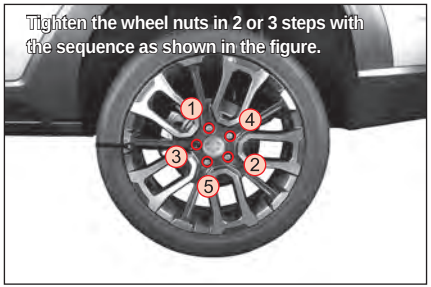
5 Remove the wheel nuts by hands while the vehicle is stationary. Remove all of the wheel nuts.

Warning

- **Do not attempt to raise the vehicle until the jack is in the proper position, and secure both to the vehicle and the ground. It may cause a personal injury or vehicle damage.**



6 Take the wheel off and place the wheel under the vehicle body. This helps to minimize any danger if the jack slip off position.



7 Then mount the tighten the wheel nuts until the temporary tire wheel is no longer loose.

Warning

- **By tightening up the spare tire until it is not loose any more, you can avoid any tilting of the tire on the wheel hub when the tire touches the ground.**

8 Lower the vehicle by rotating the combined wrench counter-clockwise until the tire touches the ground. Remove the jack.

Warning

- **While the jack is supporting your vehicle, do not use too much force to tighten the nuts. Otherwise, the vehicle may slip off and you may get injured.**

9 Tighten the wheel nuts in 2 or 3 steps with the sequence as shown in the figure.

10 When done with mounting the spare tire, place the flat tire in the luggage room. Store the jack and other emergency tools in their storages.

If over tightened, the wheel nuts could be damaged. Do not overtighten the wheel nuts by pressing the wheel nut wrench by foot or using an assist pipe.

Caution

- **After changing the tire and driving the vehicle about 1000 km, retighten the wheel nuts.**
  - Wheel nut tightening torque: 120 ~ 140 Nm

Warning

- **With the emergency spare tire, do not drive any faster than 60 km/h.**
- **The temporary spare tire is only for emergency situations. Never use it for normal driving. After installing the spare tire on a wheel, take your vehicle to a KG Mobility Authorized Service Center or a tire-specialized shop to replace it with a new regular tire.**
- **Improperly tightened wheel nuts can cause the wheel to become loose and even come off or any malfunctioning in the steering and braking system.**
- **This could lead to an accident. Be sure to tighten the wheel nuts as specified. If the wheel comes off due to a loose wheel nut, you may have a fatal accident.**
- **Using different tires could cause you to lose control while driving. Be sure to use the same size and type tires from the same manufacturer on all wheels.**

Cautions when changing the tire

Caution

► **Before changing the tire**

- Turn on hazard flashers and move off the road to a safe place away from traffic. Park on a firm and level ground.
- Set up the jack at the specified position. Never get under the vehicle while it is supported by the jack. While the vehicle is on the jack, never start or run the engine or push the vehicle.
- Have all passengers get out of the vehicle and stay in a place away from traffic.

► **During changing the tire**

- Do not completely tighten the wheel nuts at a time. Tighten the wheel nuts in the diagonal sequence in 2 or 3 steps.
- Never apply oil or grease to either wheel studs or nuts as it will cause them to overtighten.

► **After changing the tire**

- Check, repair, and retighten the replaced tire at the nearest KG Mobility Authorized Service Center or a qualified tire shop after an emergency change.
- Securely fix the tire in its carrier. Check to see if the spare tire is securely locked into the carrier without any looseness. Otherwise, it may make some abnormal noises or fall out from the carrier on the road while the vehicle is moving. This may cause an accident or hit a pedestrian.
- If this happens, the fallen tire can be a great danger to other vehicles or people. Check the tightness of the wheel nuts and tire pressure before driving.
- The spare tire is designed as an emergency spare only. Do not exceed 60 km/h speed when the spare tire is installed on the vehicle.

Caution

- Repair or change the flat tire. Stow the emergency tire in its location properly.
- Make sure to check the tightness and inflation pressure of tires before driving.
- In the vehicle equipped with TPMS, the TPMS warning lamp comes on and TPMS does not work when installing the emergency tire.

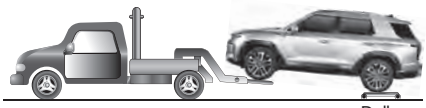
Warning

- Make sure that tighten the wheel nuts again after driving of about 1,000 km when the tires have been replaced.
- Drive the vehicle at the speed of 60km/h or less (maximum speed 80 km; maximum distance 200 km) when the vehicle is driven with the spare tire.
- Drive the vehicle in 2H mode when the spare tire is fitted. When driving in 4H mode, it will damage the drive system.
- Be sure to use the same size and type tires of the same manufacturer on all wheels so that the vehicle characteristics can be maintained safely.

Towing a disabled vehicle

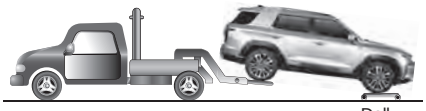
- Flat towing

- Towing with front wheels on ground



Dolly

- Towing with rear wheels on ground



Dolly

Towing with tow truck

The best towing method is to lift the entire vehicle onto the flatbed so that all wheels are off the ground. If it is impossible, put the front or rear wheels on the jig and tow the vehicle using a dolly, with other wheels off the ground.

For 4WD vehicle

Your vehicle must be towed with a wheel lift and dollies or flatbed equipment with all the wheels off the ground.

Warning

- **The 4WD system equipped vehicle should never be towed with the wheels on the ground. This can cause serious damage to the transmission or the 4WD system.**
- **If your vehicle should be towed due to wheel slips in mud or sand, you can use the towing hooks in your vehicle. However, if the load to hooks is too heavy, the towing hook, rope or chain could be broken, resulting in serious personal injury and vehicle damage.**
- **To prevent damage to your vehicle, proper lifting and towing procedures are necessary. When you need a towing service, contact KG Mobility Dealer or KG Mobility Authorized Service Center.**

For 2WD vehicles

It is not allowed to use a tow truck or keep the rear wheels from moving with the parking brake released for towing, as shown in the following figure.

Caution

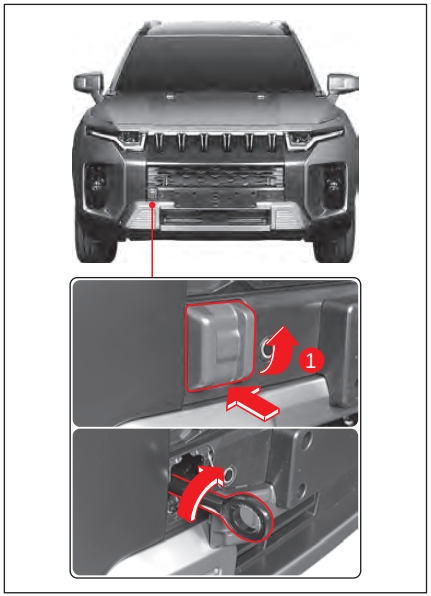
- **Do not tow with the sling-type equipment or the bumper and lower parts can be damaged.**
- **If the vehicle is towed with the driving wheels on the ground, the transmission may be damaged.**
- **Be careful not to damage the bumper and lower parts during towing.**

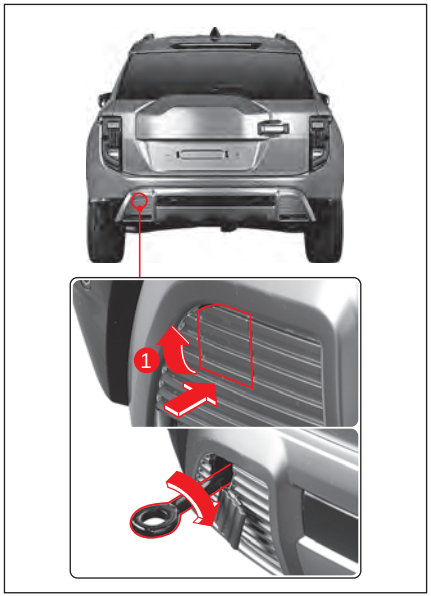
When a tow truck is unavailable (in case of emergency)

If your vehicle needs to be towed when a tow truck is unavailable, you can have your vehicle towed by installing the towing hook to a towing vehicle and the vehicle to be towed and connecting the two vehicles with the towing rope (sold separately).

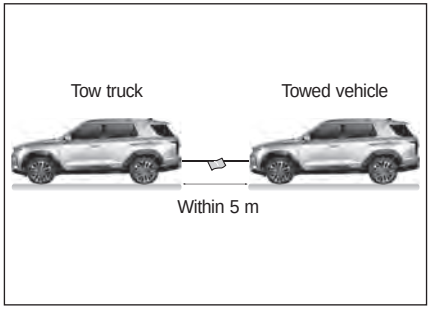
Installing the towing hook

1. Take out the towing hooks from the OVM tools stored in the storage box at the rear left side of the luggage compartment.
2. Press the bottom side (1) of the hole cover located in the front bumper of the vehicle to be towed and the rear bumper of the towing vehicle each to remove the cover.
3. Insert the towing hook into each hole and fasten it firmly.





Using a towing rope



1 Connect the towing rope to the towing hook of the towing vehicle and the vehicle to be towed securely.

2 Tie a white cloth in the middle of the rope so that the towing rope is clearly visible.

3 Release the parking brake of the vehicle to be towed and place the gear shift lever in the N (neutral) position.

4 If the engine of the vehicle to be towed is turned off, place the START/STOP switch in the ON position.

5 Turn on the hazard warning lamp of both the towing vehicle and the vehicle to be towed.

6 Start the engine of the towing vehicle and tow the vehicle to be towed.

At this time, the length of the towing rope should be less than 5 m and the total length of the towing vehicle and the vehicle to be towed should not exceed 25 m.

Tow the vehicle at a speed of 5 km/h or less.

Warning

- **Use the towing hook only for towing a vehicle for a short distance temporarily or in an emergency situation. Avoid using it for towing all the time.**
- **If you want to tow the vehicle using the towing hook, make sure that the force is applied in the front, rear and horizontal direction. Do not drive off suddenly or recklessly since it can apply excessive load to the towing hook. Doing so may damage the towing rope or chain, leading to vehicle damage or a serious injury.**

Caution

- **Avoid impractical towing and towing a vehicle which is heavier than the towing vehicle.**
- **If there are many steep downhills or slopes in the towing path, do not attempt to tow the vehicle using the towing hook.**
- **The brake performance is significantly lowered while the engine is not running. Therefore, depress the brake pedal stronger than usual when towing the vehicle using the towing hook.**
- **Tow the vehicle while operating the turn signal and the hazard warning lampalong with the towing vehicle's signals.**

Trailer towing

Your vehicle is designed primarily as a passenger vehicle therefore handling, braking, durability and economy will be affected by towing a trailer.

Your safety and satisfaction depend upon proper use of correct equipment. Also, you should avoid overloading and other abusive use.

The maximum loaded trailer weight you can pull with your vehicle depends on your intended use and what special equipment has been installed on it. Before attempting any towing, ensure that the correct equipment is fitted to your vehicle.

Your KG Mobility Dealer will help supply and install towing equipment to suit your requirement.

Trailer loading

To load your trailer properly, you must know how to measure gross trailer weight and trailer ball weight. Gross trailer weight is the weight of the trailer plus all cargo in it.

You can measure gross trailer weight by putting the fully loaded trailer on a vehicle scale.

Trailer ball weight is the downward force exerted on the hitch by the trailer coupler at its normal towing height. This weight can be measured using a bathroom scale.

The weight of your loaded trailer (gross trailer weight) should never exceed the specified values.

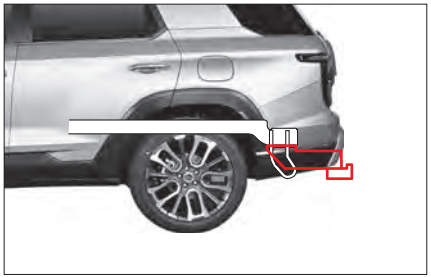
The permissible trailer loads are valid for several gradients from 6.8% to 12.6% according to engine power applied.

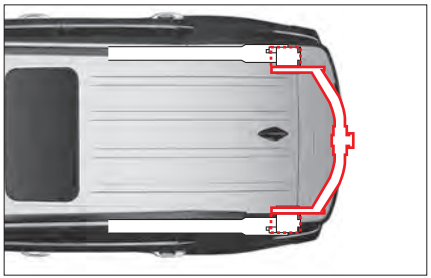
When the trailer has been coupled, the permissible rear axle load for the fully loaded towing vehicle (including occupants) must not be exceeded.

Maximum Load Limits

(unit: kg)

Engine	Type	Maximum Trailer	Trailer coupling weight	
			Maximum permissible static vertical load on the coupling device	Maximum trailer hitch
G15DTF (M/T)	with brake	1,500	60	25
	without brake	750		
G15DTF (A/T)	with brake	1,500	60	25
	without brake	500		





If you want to pull a trailer

Important points:

- You have to consider a sway control. You can check the sway control to hitch dealer.
- If the total driving distance of your new vehicle is under 800 km (500 miles), do not tow a trailer. For the first 800 km (500 miles) that you tow a trailer, do not drive over 80 km/h (50 mph) and do not start off your vehicle at full throttle. Otherwise, your engine and other parts could be damaged due to heavier loads.
- Always drive your vehicle at a moderate speed (less than 80 km/h).
- You have to consider the weight of trailer.
- The permissible trailer ball weight varies according to the cargo weight on the deck.
- It has to be limited to the number of passengers by 5 people including a driver.

Weight of trailer

To keep the vehicle and trailer safely, you must consider many factors except the maximum load limit.

The vehicle and trailer's safety depends on how you use your trailer. Vehicle speed, altitude, load, outside temperature and frequency of using trailer are all very important. Any special equipment on your vehicle also affects on your vehicle.

Weight of trailer tongue

The tongue load of a trailer is also considered very carefully because it affects the gross vehicle weight (GVW) of your vehicle. This weight includes the curb weight of vehicle, any luggage in trailer, and the passengers in vehicle. In addition to that, you must add the trailer tongue load to the GVW because your vehicle will carry all the weight.

The trailer tongue should weigh a maximum of 4% of total loaded trailer weight. To check the weights are proper, you must weigh the trailer and the tongue separately after loading. If the weights are not proper, unload some items from the trailer.

Caution

- **Never load a trailer with more weight in the rear side than in the front side. (Recommendation - Front: approx. 60%, Rear: approx. 40%)**
- **Never exceed the maximum load limits of trailer or trailer towing equipment. Improper loading may result in damage to your vehicle. It may occur the personal injury. Before driving, check the weight and loading at a commercial scale or highway patrol office equipped with scales.**
- **An improperly loaded trailer may cause the loss of vehicle control.**
- **When towing the trailer, turn the Idle Stop & Go (ISG) system off.**

Trailer brakes

If the trailer brakes are used, you should follow all instructions provided by the manufacturer. Never modify the brake system of your vehicle.

Trailer lights

Make sure your trailer is equipped with lights which meet country and local requirements.

Always check for the proper operation of all trailer lights before you start to tow.

Tires

When towing trailers, be sure your tires are properly inflated to the inflation pressure.

Safety chains

Always attach safety chains between your vehicle and the trailer. Cross the safety chains under the tongue of the trailer so that the tongue will not drop to the road if it becomes separated from the hitch. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack to permit full turning. Never allow safety chains to drag on the road.

Brake fluid

Change the brake fluid every 15,000 km (9,000 miles) under the following conditions.

- Towing a trailer frequently.
- Driving in hilly or mountainous terrain.

Automatic transmission fluid

More frequent maintenance is required if your vehicle tows trailer frequently.

Towing tips

When towing a trailer, your vehicle will handle differently compared with normal driving condition.

- For safety, observe the following precautions:
- Practice turning, stopping, and reversing before you begin towing in traffic.
  Do not tow in traffic until you are confident that you can handle the vehicle and trailer safely.
- Before driving, make sure that the lighting system of the trailer works properly.
- Do not drive faster than 80 km/h.
- Make sure that you have enough room when cornering and avoid sudden maneuvers.
- Avoid abrupt starts, acceleration or stops.
- Avoid sharp turns or lane changes.
- Always have someone guide you when reversing.
- Allow adequate stopping distance.
  Stopping distance is increased when you tow a trailer.
- Avoid holding the brake pedal down too long or too frequently, which will cause the brakes to overheat and result in reduced brake efficiency.
- Always block the wheels on both vehicle and trailer when parking. Apply the parking brake firmly.
- Parking on a steep slope is not recommended. You really should not park your vehicle, with a trailer attached, on a hill.
  If something goes wrong, such as the trailer/caravan hitch becoming disengaged, people can be injured and both the vehicle and trailer can be damaged.
- If someone removing the blocks stands directly behind the trailer, he could be injured. If your brakes or the hitch slipped, the trailer could roll backward. Make sure anyone removing blocks from your wheels stands to one side.
- Take note of trailer manufacturer's instructions.

Driving on hill

Reduce speed and shift to a lower gear before you start down a long or sleep downgrade. If you don't shift down, you might have to use your brakes so much that they would get hot and no longer work well.

On a long uphill grade, shift down and reduce your speed to a level which minimizes the possibility of engine and transmission overheating.

Notice

- **When towing a trailer on steep hill (over 12%), pay particular attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the gauge reaches to the "H" mark, stop your vehicle at a safe place and allow the engine to idle until it cools down. When the engine has cooled sufficiently, you may proceed.**
- **To avoid the engine and transmission overheating, you must check the driving speed depending on trailer weight and uphill grade.**

Parking on hills

You really should not park your vehicle, with a trailer attached, on a hill. If something goes wrong, your rig could start to move. People can be injured, and both your vehicle and the trailer can be damaged.

But if you ever have to park your rig on a hill, here's how to do it:

1. Apply your regular brakes, but don't shift into PARK (P) for automatic transmission yet, or into a gear for a manual transmission.
2. Have someone place chocks under the trailer wheels.
3. When the wheel chocks are in place release the regular brakes until the chocks absorb the load.
4. Reapply the regular brakes. Then apply your parking brake, and then shift to PARK (P) for automatic transmission, or First or Reverse gear for a manual transmission.
5. Release the regular brakes.

When you are ready to leave after parking on a hill

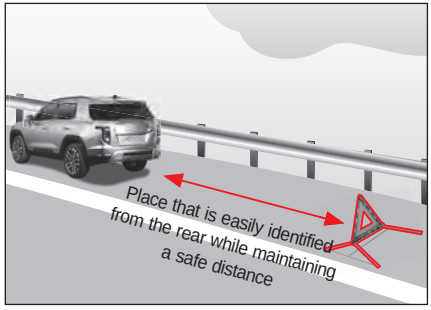
1. Apply your regular brakes and hold the pedal down while you:
   - Start your engine
   - Shift into a gear and
   - Release the parking brake.
2. Let up on the brake pedal.
3. Drive slowly until the trailer is clear of the chocks.
4. Stop and have someone pick up and store the chocks.

Maintenance when towing trailer

Your vehicle will need service more often when you're towing a trailer. See the maintenance Schedule for more on this. Things that are especially important in trailer operation are engine oil, brake pads & discs, automatic transmission fluid. Each of these is covered in this manual and the index will help you find them quickly. If you want to tow a trailer, it's a good idea to review these sections before you start your trip.

Check periodically to see that all hitch nuts and bolts are tight.

When the vehicle has stopped due to a failure



If the vehicle malfunctions and has stopped while driving, do not panic and take an action according to the following order.

1. Turn on the hazard warning lamp of the vehicle.
2. Move your vehicle to the right shoulder of the road or a safe location.
3. Place a warning triangle.

   The position that is easily identified by a driver in an approaching vehicle while maintaining a safe distance (100 m during daytime, 200 m in the rear during night time) is an appropriate area to place the warning triangle.

   Place a road flare additionally at night.
4. Evacuate all occupants to a safe place.
5. Request an emergency rescue service or vehicle towing.

In the event of an accident

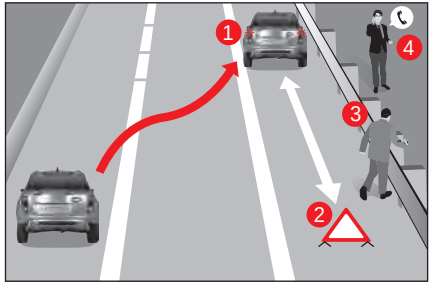
If an accident has occurred while driving, do not panic and take an action according to the following order.

1. Turn on the hazard warning lamp of the vehicle.
2. Move your vehicle to the right shoulder of the road or a safe location.
3. Place a warning triangle.

   The position that is easily identified by a driver in an approaching vehicle while maintaining a safe distance (100 m during daytime, 200 m in the rear during night time) is an appropriate area to place the warning triangle.

   Place a road flare additionally at night.
4. Evacuate all occupants to a safe place.
5. If anyone is injured, give aid and call an ambulance.
6. Contact the nearest police station and when a police officer arrives, follow his/her instructions.
7. Even in case of a minor accident, be sure to visit a hospital and see the doctor.

Tips when an accident or a malfunction occurs on the expressway



When you stop the vehicle on the expressway due to an accident or a malfunction, take an action according to the following order in order to prevent a secondary accident.

1. Turn on the hazard warning lamp promptly and move the vehicle to the shoulder of the road (1).
2. Place a warning triangle on the rear side of the vehicle (2). (Place a road flare additionally at night)
3. The driver and any occupants should be evacuated to a safe area such as behind the guardrail (3).
4. If you need help, contact the police, fire department, or highway department.

In the event of a fire

When a fire has occurred in the vehicle, do not panic and take an action according to the following order.

1. Turn on the hazard warning lamp of the vehicle.
2. Stop the vehicle at a safe place immediately and stop the engine.
3. Extinguish the fire using an extinguisher.
4. If you cannot extinguish the fire, report it to a police station or a fire station.

   At this time, do not approach the vehicle andmaintain a safe distance with the vehicle.

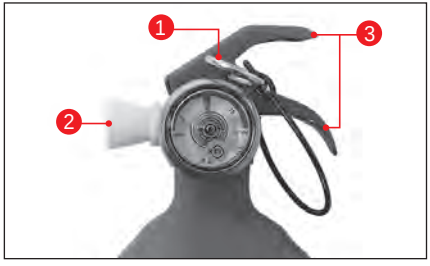
Warning

- **When a vehicle accident occurs, the fuel may leak, causing a fire. Stop the engine immediately and keep any Inflammables away from the vehicle.**

Placing an extinguisher in the vehicle

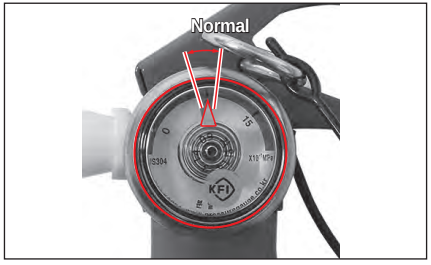
Place an extinguisher in the vehicle since it is needed for early fire extinguishing when a fire occurs.

How to use the extinguisher



1. Remove the safety pin (1) from the extinguisher with the wind at your back.
2. Face the extinguisher nozzle (2) towards the place where the fire occurs.
3. Hold the handle (3) and spray to the place where the fire occurs, using a sweeping motion.

Checking and maintaining the extinguisher



- Check at least once a month if the needle on the pressure gauge of the extinguisher is in the normal range.

  If there is a pressure loss or other abnormalities, have the extinguisher serviced immediately.
- The lifetime of the extinguisher is approximately 5 years when it is maintained under normal conditions.

  After 5 years have passed, it should be inspected and confirmed by a fire fighting equipment company every 2 years.
- After using the extinguisher, be sure to release the chemical (ABC powder) from the inside of the extinguisher completely and refill with an ABC powder fire extinguishing agent.

  If it is left unattended for a long period of time, the contents may become hardened and it cannot be used. Shake the extinguisher periodically.

In the event of a heavy snow

When there is a heavy snow, do not panic and refer to the following tips for actions.

- Always listen to the radio and use the expressway information call number.
- Drive slowly on a curved road, an uphill road or a bridge.
- Avoid parking or leaving the vehicle on the shoulder of the road that cause inconvenience for snow removal operations.
- Be sure to leave your contact information when you leave the vehicle unavoidably.
- Drive slowly while securing a safe distance between vehicles.
- Avoid using the brake and stop the vehicle while reducing the vehicle speed using the engine brake.
- Remove snow near the vehicle frequently to prevent the exhaust pipe (muffler) from being blocked.

6. Periodic Checking and Maintenance

You can check the necessary periodic check and maintenance methods in detail for safe and pleasant vehicle driving.

Scheduled maintenance services - gasoline engine

* Use only approved KG Mobility genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

Maintenance item / Maintenance interval		Kilometers (miles) or time in months, whichever comes first							
	x1000 km	15	30	45	60	75	90	105	120
	x1000 miles	10	20	30	40	50	60	70	80
	Months	12	24	36	48	60	72	84	96

Engine control system

Drive belt		I	I	I	I	I	I	I	I
Engine oil & engine oil filter (1)* (3)*		R**	R	R	R	R	R	R	R
(Initial check: 7500 km)		Shorten the service interval under severe conditions							
Cooling system hose & connections		I	I	I	I	I	I	I	I
Engine coolant (3)*		Change every 200000 km or 5 years. And, inspect replenish if necessary.							
Fuel filter (2)*		Inspect every 30000 km (if using poor quality of fuel, replace every 50000 km)							
Fuel line & connections		I	I	I	I	I	I	I	I
Air cleaner (2)*		I	R	I	R	I	R	I	R
		Shorten the service interval under severe conditions							
Ignition timing		I	I	I	I	I	I	I	I
Spark plugs	G15DTF	Change every 60000 km							
Charcoal canister & vapor lines		-	I	-	I	-	I	-	I

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

** - In order to secure engine long life and effective break-in, first oil (factory filled) would be recommended to drain within 10000 km.

(1)* If vehicle is operated under severe condition: Shorten the service interval.

- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- High load driving such as trailer towing
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, pollutant area or off-road driving, driving in dusty condition or sandy condition, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* Refer to "Recommended fluids and lubricants".

Maintenance item \ Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
	x1000 km	15	30	45	60	75	90	105	120
	x1000 miles	10	20	30	40	50	60	70	80
	Months	12	24	36	48	60	72	84	96

Chassis and body

Exhaust pipes & mountings	I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*	Change every 2 years (inspect frequently)							
Parking brake / Brake pads (Front & Rear) (4)*	I	I	I	I	I	I	I	I
Brake line & connections (including booster)	I	I	I	I	I	I	I	I
Manual transaxle oil (5)*	Inspect and replenish every 60000 km (or 3 years) (Severe driving condition: Change every 120000 km)							
Clutch & brake pedal free play	I	I	I	I	I	I	I	I
Power transfer unit oil (6)*	I	I	I	R	I	I	I	R
Rear axle oil	Inspect every 15000 km, change every 100000 km (Frequent check of oil leak)							
Automatic transaxle fluid (6)*	Change every 100000 km under severe condition							
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*	Check frequently and adjust or replace if necessary							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to "Recommended fluids and lubricants".

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 60000 km (or 3 years)
Normal driving condition: Fill for Life
(Severe driving condition: Change every 120000 km)

(6)* If vehicle is operated under severe condition: Shorten the service interval.
- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

Maintenance item \ Maintenance interval		Kilometers (miles) or time in months, whichever comes first							
	x1000 km	15	30	45	60	75	90	105	120
	x1000 miles	10	20	30	40	50	60	70	80
	Months	12	24	36	48	60	72	84	96

Chassis and body

Tire condition & inflation pressure	Check frequently and adjust or replace if necessary							
Wheel alignment (7)*	Inspect when abnormal condition is noted							
Steering wheel & linkage	I	I	I	I	I	I	I	I
Outer ball joint inspection and replacement	I	I	I	I	I	R	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary							
Wheel bearing grease	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	R	R	R	R	R	R	R	R
	Shorten the service interval under severe conditions							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.

- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter

- Pollutant area or off-road driving, extended air conditioner or heater operation

Scheduled maintenance services (under severe condition) - gasoline enginei

* Use only approved KG Mobility genuine parts.

Maintenance service and record retention are the owner's responsibility. You should retain evidence that proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service chart.

Maintenance interval / Maintenance item		Kilometers (miles) or time in months, whichever comes first							
	x1000 km	7.5	15	22.5	30	37.5	45	52.5	60
	Months	6	12	18	24	30	36	42	48

Engine control system

Drive belt		I	I	I	I	I	I	I	I
Engine oil & engine oil filter (1)* (3)*		R**	R	R	R	R	R	R	R
Cooling system hose & connections		I	I	I	I	I	I	I	I
Engine coolant (3)*		Change every 100000 km or 3 years. And, inspect replenish if necessary.							
Fuel filter (2)*		Inspect every 15000 km (if using poor quality of fuel, replace every 30000 km)							
Fuel line & connections		I	I	I	I	I	I	I	I
Air cleaner (2)*		I	R	I	R	I	R	I	R
Ignition timing		I	I	I	I	I	I	I	I
Spark plugs	G15DTF	Change every 40000 km							
Charcoal canister & vapor lines		-	I	-	I	-	I	-	I

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

** - In order to secure engine long life and effective break-in, first oil (factory filled) would be recommended to drain within 7500 km.

(1)* If vehicle is operated under severe condition:
Shorten the service interval.
- Frequent stop-and-go traffic, extended idling, short driving distance below 6 km, driving distance below 16 km when the outside temperature remains below freezing
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- High load driving such as trailer towing
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)

(2)* If vehicle is operated under severe condition, pollutant area or off-road driving, driving in dusty condition or sandy condition, frequently inspect the air cleaner, if necessary, change the air cleaner.

(3)* Refer to "Recommended fluids and lubricants".

Maintenance interval / Maintenance item	Kilometers (miles) or time in months, whichever comes first								
	x1000 km	7.5	15	22.5	30	37.5	45	52.5	60
	Months	6	12	18	24	30	36	42	48

Chassis and body

Exhaust pipes & mountings	I	I	I	I	I	I	I	I
Brake / Clutch fluid (3)*	Change every 1 years (inspect frequently)							
Parking brake / Brake pads (Front & Rear) (4)*	I	I	I	I	I	I	I	I
Brake line & connections (including booster)	I	I	I	I	I	I	I	I
Manual transaxle oil (5)*				I				I
Clutch & brake pedal free play	I	I	I	I	I	I	I	I
Power transfer unit oil (6)*	I	I	I	I	I	I	I	R
Rear axle oil	Inspect every 7500 km, change every 50000 km (Frequent check of oil leak)							
Automatic transaxle fluid (6)*	Change every 100000 km under severe condition							
Check play/tightness for lower bolt/nut and ball joint grease leak on chassis and body (6)*	Check frequently and adjust or replace if necessary (change every 100000 km only ball joint)							

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(3)* Refer to “Recommended fluids and lubricants”.

(4)* More frequent maintenance is required if the vehicle is operated under any of the following conditions:
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain, or
- When doing frequent trailer towing, or
- Uses such as found in taxi, police or delivery service.

(5)* Inspect and replenish every 30000 km (or 2 years)
Normal driving condition: Fill for Life
(Severe driving condition: Change every 120000 km)

(6)* If vehicle is operated under severe condition: Shorten the service interval.
- Towing a trailer or off-road driving (Inspect the leak of fluid at any time, occasionally)
- Taxi, patrol service or delivery service (extended idling and excessive driving with low speed)
- Frequent stop-and-go traffic, extended idling, short driving distance
- Driving in a hilly or mountainous terrain, sandy, or dusty area
- Driving frequently at high speed over 170 km/hour
- Driving frequently in area where heavy traffic under the ambient temperature above 32°C

Maintenance item \ Maintenance interval	Kilometers (miles) or time in months, whichever comes first								
	x1000 km	7.5	15	22.5	30	37.5	45	52.5	60
	Months	6	12	18	24	30	36	42	48

Chassis and body

Tire condition & inflation pressure (7)*	Check frequently and adjust or replace if necessary							
Wheel alignment (7)*	Inspect when abnormal condition is noted							
Steering wheel & linkage	I	I	I	I	I	I	I	I
Outer ball joint inspection and replacement	I	I	I	I	I	R	I	I
Drive shaft boots (8)*	I	I	I	I	I	I	I	I
Seat belts, buckles & anchors	I	I	I	I	I	I	I	I
Lubricate locks, hinges & bonnet latch	Check frequently and adjust or replace if necessary							
Wheel bearing grease	I	I	I	I	I	I	I	I
Propeller shaft grease - Front / Rear (9)*	I	I	I	I	I	I	I	I
Air conditioner filter (10)*	R	R	R	R	R	R	R	R

Chart Symbols:

I - Inspect these items and their related parts. If necessary, correct, clean, replenish, adjust or replace.

R - Replace or change.

(7)* If necessary, rotate and balance wheels.

(8)* After completion of off-road operation, the drive shaft boots should be inspected.

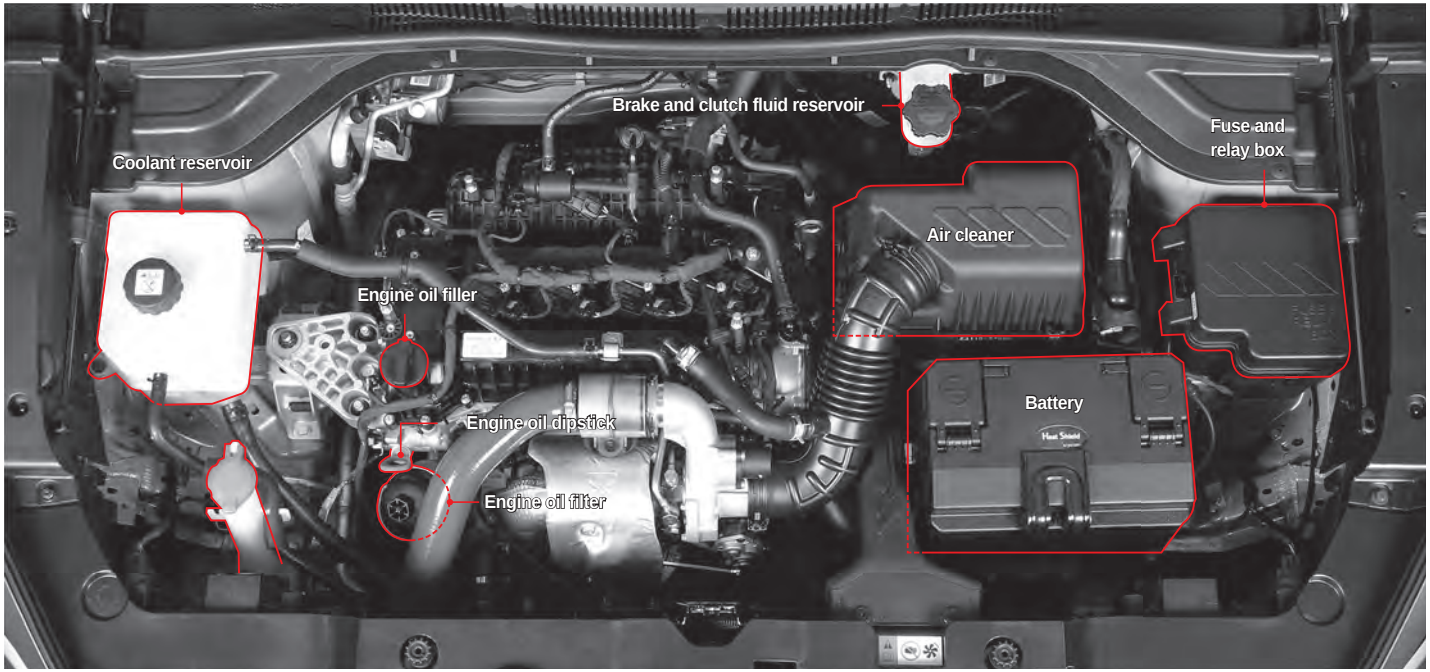
(9)* Inspect propeller shaft grease every 5000 km or 3 months if the vehicle is mainly driven under severe condition.

- In off-road or dusty road, or
- In heavy city traffic where the outside temperature regularly reaches 32°C (90°F) or higher, or
- In hilly or mountainous terrain.

(10)* Severe Conditions in Air Conditioner Filter

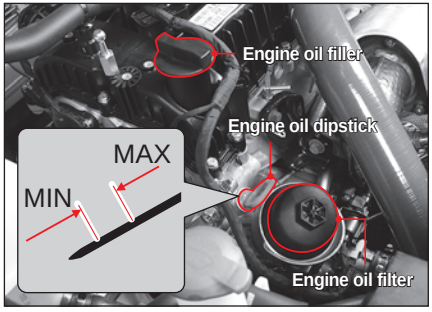
- Pollutant area or off-road driving, extended air conditioner or heater operation

Checking the engine room



Warning

- After driving the vehicle, the systems including the engine, radiator, exhaust manifold, catalyst converter and exhaust pipe (muffler) are very hot, so caution should be taken when checking the engine room. Turn off and cool down the engine properly before checking in order to prevent a burn.
- There is a risk of serious injury from rotating parts such as the engine cooling fan when checking and working on the engine compartment. In addition, the cooling fan may rotate regardless of whether the engine is started or not.



Level Check

Park the vehicle on a level ground and apply the parking brake.

Stop the engine and wait for more than 5 minutes.

1. Pull out the dipstick and wipe it out with a clean cloth. Reinsert it all the way.
2. Pull out it again and check the oil level.
3. The oil level should be between the maximum (Max) mark and minimum (Min) mark on the oil dipstick. Oil should be replenished before the level goes below the minimum mark.

Replenishment

1. If the level gets to the lower point, open the filter cap on top of the cylinder block and add the genuine oil without exceeding the level of the upper mark.
2. Recheck the oil level after 5 minutes.

Caution

- **Regularly check the engine oil level and add KG Mobility genuine engine oil if necessary.**
- **Clean the dipstick with clean cloth so that any foreign materials cannot get into the engine.**
- **The oil should not go above the upper mark on the dipstick.**
- **The engine oil may be consumed more if the engine is new.**

Warning

- **Operating vehicle with insufficient amount of oil can damage the engine. Make sure the engine oil level is correct and add oil if necessary.**

Function of engine oil

Engine oil's major function is to lubricate and cool the parts inside of the engine, which enables engine to work properly.

Consumption of Engine Oil

The consumption of engine oil is depending on the viscosity and quality of the oil, and the driving habit. More oil may be required under the following conditions;

- When the Vehicle is New

A new engine usually consumes more oil because its pistons, piston ring and cylinder walls are not yet adjusted with an optimal condition.

Oil Consumption : Max. 0.5 Liter per 1000 km

Accordingly, it is necessary for the driver to check frequently the oil level and to replenish oil if needed. KG Mobility Corporation recommends that the oil level be checked every time you refuel the vehicle or you drive the long distance until the first 5000 km.

- When driving at High Engine Speeds

As long as you keep the followings with sufficient care in your first running the vehicle, it will guarantee you to get excellent and comfortable performance for a long with your vehicle.

- Remember to check the engine oil level and shorten the cycle to refuel the engine oil under severe driving conditions.
- Avoid subjecting to engine to heavy loads by driving at full throttle, especially be careful when the outside temperature remains below freezing for the first 1000 km.
- Do not use the trailing in the first 1000 km driving

*** What's Severe Driving Condition?**

- Driving at the high engine speed or at high-speed
- Driving for consecutive two hours at high speed
- Driving the rough road, off-road, dirt-laden road, and muddy roads
- Driving in areas where salt or other corrosive materials are being used
- Repeated driving in short-distance
- Driving with the excessive idling
- High load driving such as trailing

Engine care

Observe the followings to keep the engine in good condition:

- Check the engine oil level frequently under severe driving condition and add some if necessary. The change interval should be shortened as well.
- Do not run a new engine at high speed until its driving distance gets 1000 km. Be extra careful when the engine is cold.
- After installing a new engine, do not tow another vehicle or a trailer until its driving distance gets 1000 km.

Change interval

- The engine oil filter element should be changed at the same time with the engine oil.
- Use only the KG Mobility genuine engine oil and filter.

Engine oil

Refer to Section “SCHEDULED MAINTENANCE SERVICES”.

Engine oil filter

Service Interval
Same interval with the engine oil

Caution

- **The service interval may be reduced if your vehicle is driven in rough conditions.**
- **Change the engine oil based on the driving distance or period, whichever comes first.**

Specification and capacity

	Service interval	
Specifi-cation	Gasoline	Quality class: KG Mobility genuine engine oil (Approved by ACEA C2 SAE 0W/30)
Capacity	G15DTF	4.5 ℓ

Warning

- **Use only KG Mobility genuine engine oil and filters. Use of nonrecommended products could cause damage to the engine.**

Warnings and cautions when checking

Caution

- **Regularly check the engine oil level and add the KG Mobility genuine engine oil if necessary.**

Warning

- **Clean the dipstick with a clean cloth so that any foreign materials cannot get into the engine.**
- **Use only the KG Mobility genuine engine oil.**
- **The oil should not go above the upper mark on the dipstick.**
- **Operating with insufficient or too much amount of oil can damage the engine.**

SAE viscosity classes

The SAE classes (viscosity) should be selected in accordance with the average seasonal air temperature.

Applying the SAE classes exactly on the basis of the outside air temperatures would necessitate frequently changing the engine oil. The temperature limits for the SAE classes should therefore be regarded as reference temperatures and the actual air temperature may be higher or lower for a short period of time.

* How to check engine oil specification

Example:

0W, 5W, 10W, 15W, 20W, 25W — Winter oil viscosity (W: Winter)

20, 30, 40, 50, 60 — Summer oil viscosity

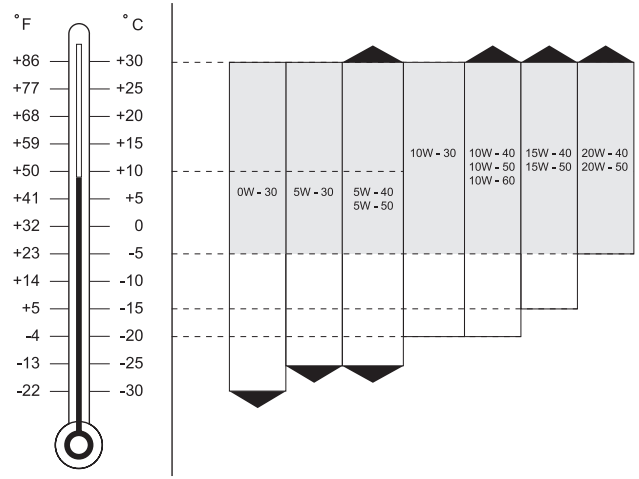
- The numerical, for example SAE 10W, relates to viscosity at particular temperature and the alphabet “W” indicates the oil’s suitability for colder temperature.
- For summer oil viscosity, higher numbers mean higher viscosities.

Notice

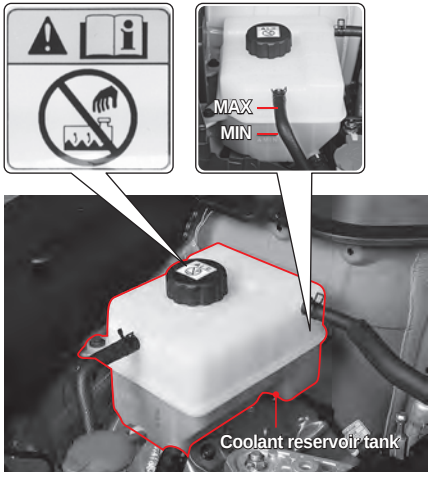
- **No separate washer fluid reservoir for the rear window is provided. The washer fluid is supplied from the washer fluid reservoir for the windshield.**

Engine

The viscosity should be selected according to outside temperature. Do not switch to a different viscosity in the event of brief temperature fluctuations.



Engine coolant



Level Check

Park the vehicle on level ground and apply the parking brake.
Stop the engine and wait until it cools.

1 The coolant level should be between the MAX and MIN mark on the coolant reservoir.

2 Check the coolant level. If the level is below the “MIN” mark, immediately add coolant.

Service Interval

- Replacement: Every 5 years or every 200000 km

Gasoline Engine (G15DTF)	7.0ℓ	KG Mobility genuine coolant Anti-Freeze SYC-1025, Anti-Freeze:Water = 50:50 ORGANIC ACID TYPE, COLOR:BLUE

- Check: Everyday, before driving off
- Replenishment: Replenish as necessary

Warning

- **Do not remove the coolant reservoir cap when the engine and the radiator are hot. The cooling system may spray hot coolant if the cap is removed, causing serious injuries.**
- **Use only the KG Mobility genuine coolant.**

Replenishment

Use only the 50/50 mixture of soft water and antifreeze as specified.

1 Open the coolant reservoir tank cap slowly when the engine is cold. At this time, you can hear a “hissing” sound.

2 When there is no more “hissing” sound, remove the cap from the reservoir tank.

3 Add the 50:50 mixture of water and antifreeze to the coolant reservoir tank.

4 If no unusual things happen, tighten the coolant reservoir cap.

Caution

- **Avoid any direct contact of the coolant to the painted body of the vehicle.**

6

Caution

- An incorrect coolant mixture can result in severe malfunction or engine damage.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.
- Check the antifreeze mixture ratio after adding or replacing the coolant.

Notice

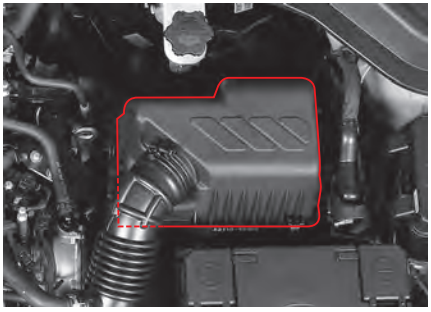
- If in doubt about the mix ratio, a 50% water and 50% antifreeze mix is the easiest to mix together as it will be the same quantity of each. It is suitable to use for most temperature ranges of -36°C (-33°F) and higher.
- The antifreeze mixture ratio at the time of vehicle delivery is 45%.

Warning

- When the coolant level is too low, the engine can overheat. If the coolant temperature gauge in the instrument cluster goes up abnormally, immediately check the coolant level. Use only the KG Mobility genuine coolant. If different types of coolants or unapproved coolants are used to refill, chemical reactions can be caused and block the flow of the coolant. This may cause the engine to overheat or burning inside the engine.

Warning

- Scalding hot coolant and steam could be blown out under pressure, which could cause serious injury. Never remove the coolant reservoir tank cap when the engine and radiator are hot.
- Use only the KG Mobility genuine coolant.



Cleaning

Refer to Section “SCHEDULED MAINTENANCE SERVICES”.

Blow the compressed air through the element in the opposite direction to normal air flow to clean the element.

Caution

- **If you blow the compressed air to normal air flow, the engine will be damaged due to foreign materials entering.**
- **Be careful with the direction of the compressed air on the air cleaner.**

Caution

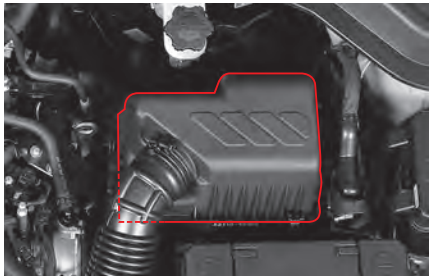
If vehicle is operated under severe condition

- **Pollutant area or off-road driving**
- **Driving in dusty condition or sandy condition**

frequently inspect the air cleaner, if necessary, change the air cleaner.

Warning

- **Do not drive your vehicle with an improperly installed air cleaner element or without it. It may damage the engine or may cause a fire.**
- **Do not let any object enter the housing when cleaning the air cleaner. It may damage the engine or may cause an engine to stall.**

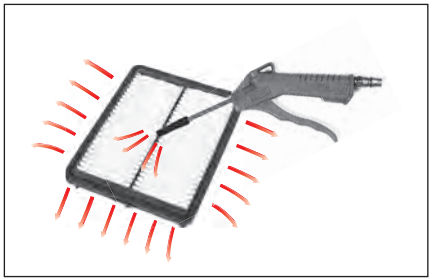


If the vehicle is operated in very dusty or sandy areas, replace more often than at the usual recommended intervals. If it is dirty, shake the element to remove dust. Clean the inside of the air cleaner housing and cover with a damp cloth.

Clean the air cleaner element by blowing compressed air through it in the opposite direction to normal air flow.

Warning

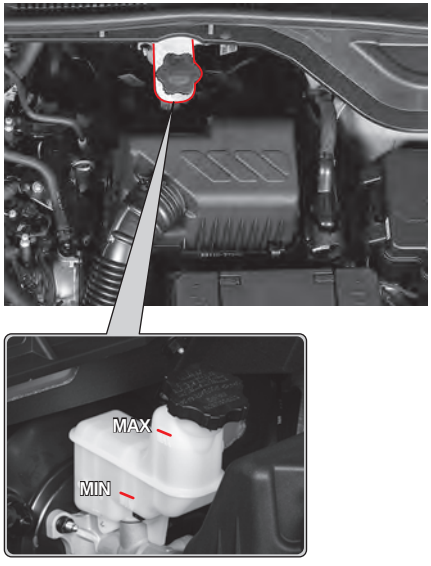
- **Engine can be damaged.**
- **Do not operate the vehicle without air cleaner element.**



Blow the compressed air through the element in the opposite direction to normal air flow to clean the element as shown above.

Change

1. Open the clamp and remove the cover.
2. Replace the air cleaner element with a new one. Make sure that the element is correctly installed in the air cleaner housing.
3. Close the cover and close the clamp.



Specification and Replacement

Specification	DOT 4
Service interval	Every 2 years

Level Check and Replenishment

- The fluid level should be between the “MAX” and “MIN” levels on the reservoir.
- Check the level on a level surface. If it drops to or below the MIN mark, refill the tank with the specified fluid. Only use the specified fluid.

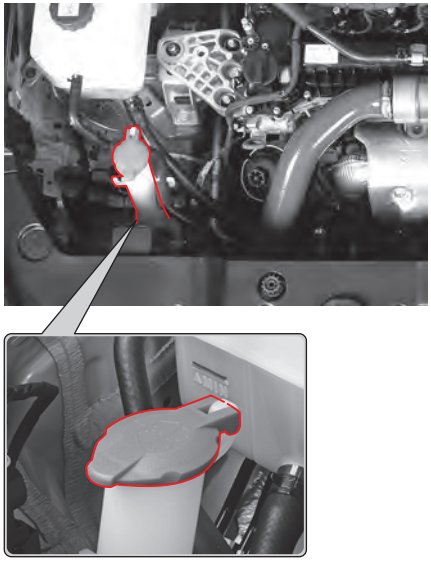
Caution

- **Be careful not to let any foreign materials enter the tank when adding the fluid.**
- **Do not add the fluid above the “MAX” level.**
- **Do not allow the fluid to make contact with the body paintwork.**
- **After adding the fluid, tighten the cap securely.**
- **If frequent refills are required, have the system checked by a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Warning

- **Use only the KG Mobility genuine brake fluid.**
- **Do not allow the fluid to make contact with skin or eyes. If contact happens, rinse affected areas immediately with plenty of water. If irritation persists, consult a doctor.**
- **The fluid gradually decreases according to brake pad wear. A sudden drop of the fluid level may indicate a leak in the system. In this case, have the system checked by a KG Mobility Dealer or KG Mobility Authorized Service Center.**

Top up washer fluid



Frequently check the washer fluid level and add the specified product as needed.

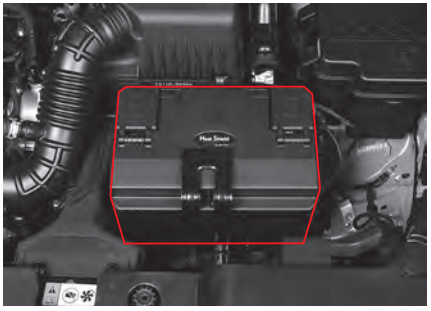
In winter, use only the specified washer liquid for winter season.

Caution

- **If you use plain water as washer fluid, it will freeze during the winter and damage the washer fluid reservoir and motor. Use only the specified washer fluid.**
- **If you operate the washer switch without washer fluid, the motor could be damaged due to overloads. Therefore, if there is no washer fluid, do not operate the washer motor.**
- **Operating the wipers on a dry surface on the windshield or rear window without any washer fluid may cause damage to the glass. Operate the wipers after sufficiently spraying the washer fluid.**
- **Avoid any spills of washer fluid on the engine or body paint of your vehicle during replenishment. If washer fluid spills onto your hand or other body part, wash it away under a clean water flow.**
- **There is no independent washer reservoir for the tailgate window. The front washer reservoir is also for the tailgate window.**

Warning

- **The washer fluid includes flammable materials to prevent freezing. It could cause a fire when directly contacted with flames. When checking the washer fluid, avoid the flames near the washer fluid tank.**
- **If engine oil or antifreeze is used as the washer fluid, it will decrease your visibility through the windshield and may cause an accident.**



When the battery charge warning light ( ) on the instrument cluster comes on, the battery is not normally charging. If the warning light comes on while driving, turn off all unnecessary electrical devices and have the system checked by a KG Mobility Dealer or KG Mobility Authorized Service Center.

Battery Maintenance

- Make sure the terminal connections are securely tightened.
- If the terminals are corroded, clean them with a wire brush or sand paper.
- The battery terminal should be disconnected only when the ignition key is removed from the key cylinder. Disconnecting the terminal with the key in the “ON” or “ACC” position may cause a sudden change in voltage and damage various electrical systems.
- Check the battery for any cracks, damages or leaks. Replace it if necessary. To remove any battery fluid on the battery surface, wear rubber gloves and wipe the fluid out with a wet-soapy cloth.

Specification

	Non-ISG	ISG
Specification	MF / 12V - 60AH	AGM / 12V - 70AH
Capacity	60AH	70AH

Caution

- **If you disconnect the battery terminal when the engine is running, electrical systems could be damaged.**
- **To remove the battery cable, disconnect the negative cable first and be careful on the battery terminal polarity when you connect the cables. The negative and the positive should not be confused.**
- **The polarity of the battery, i.e. the connections for positive and negative cables, must not be interchanged. Never short-circuit the battery.**
- **When the ambient temperature is too low, the battery capacity will drop and can be frozen.**
- **Keep the battery electrolyte at its specified level. If the electrolyte level is higher than the MAX level, it can overflow during battery charging and if the electrolyte is overcharged, the battery can explode.**
- **Only use a battery with the approved voltage and capacity. Otherwise, an incompatible battery can catch fire.**

Warning

- The battery has acid that can burn you. And its gas can explode. You can get serious injuries if you are not careful. Keep naked flames, sparks and smoking items away from the battery.
- Loosely connected batter terminals can set up sparks. These sparks can cause a fire with flammable gas. Therefore, tightly connect the terminals.
- At night, if you need to check the engine room, do not use a lighter, but only use a battery-powered flashlight.
- Because the battery electrolyte is very strong acid, avoid any direct contact of the battery electrolyte on your skin or vehicle's body. If the acid contacts your skin, thoroughly wash your skin with fresh water and see your doctor. Do the same on your vehicle.
- Wear eye protection when working with a battery. If working in a closed area, keep good ventilation.

Warning

- Always use the battery with correct voltage for the vehicle. Otherwise, there is a risk of fire.
- Observe the indications on the battery.

Always read the safety instructions in the User Manual before working on the battery.

The battery cell always contains highly flammable hydrogen gas which may explode if ignited. Be sure to keep it away from a cigarette, a spark or other flames.

Wear a protective goggle when charging the battery or performing any work.
In addition, ensure adequate ventilation of the enclosed space.

The battery electrolyte solution contains a highly corrosive sulfuric acid. Be careful not to contact it with skin, eyes, clothes or paint. In particular, keep out of the children's reach.

When in contact with the skin, wash off the contact area; In case of eye contact, flush with running water for at least 15 minutes, and seek medical help immediately.

The hydrogen gas in the battery is highly flammable and may explode if ignited.

Do not throw out used battery as this pollutes the environment and is hazardous to our health. For environmental protection, used, properly dispose of used battery at designated disposal sites only.

- To check the battery and engine compartment in the night, always use flash light and never use the lighter or etc.

Spark plugs - Gasoline engine

Spark plugs should be inspected periodically for carbon deposits. When carbon accumulates on a spark plug, a strong spark may not be produced.

Do not clean the electrodes with a fine wire brush and carefully scrape the carbon off the insulator with a small file. The spark plugs should then be blown clean with compressed air and the upper insulator wiped clean. Do not adjust the spark plug gap.

Service Interval

Replacement	Change every 60,000 km	
Specification	FM	RER6WYPB
	Gap	0.7 ~ 0.8 mm

Caution

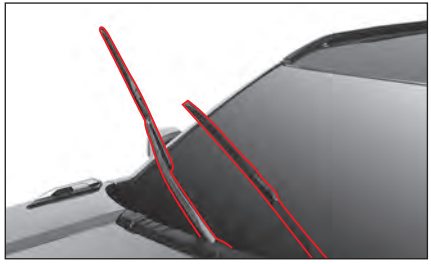
- **When replacing the spark plugs, disconnect the negative terminal of the battery and turn off all the switches.**
- **It is recommended that the engine be cool or cold when changing the spark plugs (you could burn yourself).**
- **Do not use non-recommended spark plugs.**
- **Do not allow contaminants to enter spark plug hole.**

Warning

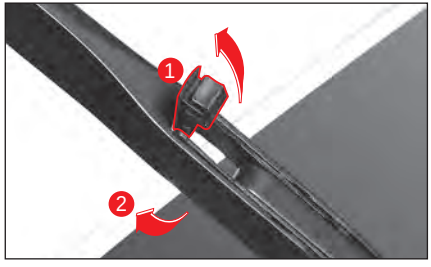
- **Spark plugs may be very hot. Be careful not to burn yourself.**

Replacing the blade of windshield wiper

1 Lift the wiper arm up with the engine turned off.



2 Press the wiper blade retainer (1) and pull the wiper blade out in the arrow direction (2).

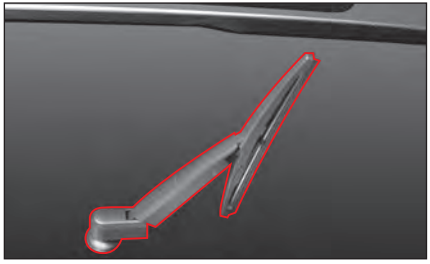


3 Insert a new wiper blade.

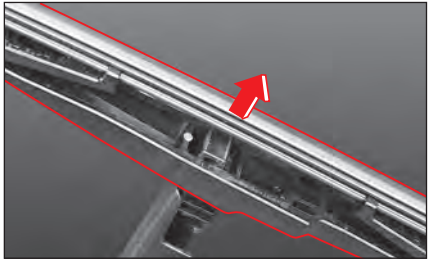
4 Put the wiper arm down.

Replacing the blade of rear window wiper

1 Lift the wiper arm up with the engine turned off.



2 With the wiper blade lifted to its side, remove it by pulling it in the arrow direction.



3 Insert a new wiper blade until a clicking sound occurs.

4 Put the wiper arm down.

Specifications of wiper blade

Windshield wiper		Rear window wiper
Driver seat side	Front passenger seat side	
600mm	450mm	250mm
24 "	18 "	10 "

Warning

- **If there is a problem in wiper operation, it can be a fatal obstacle to safe driving when it rains or snows. Never drive the vehicle on a snowy day or a rainy day if the wiper does not operate.**
- **Holding the wiper arm or placing your hand near the operating part when the wiper is operating may cause an injury.**

Caution

- **Do not open the engine hood with the wiper lifted up. Doing so may damage the engine hood and the wiper.**
- **Do not operate the wiper when the windshield is dry.**
- **Do not wipe the windshield or the rear window with a towel stained with oil or wax. If the windshield or the rear window is stained with oil or wax, an abnormal noise may occur when you operate the wiper or light is reflected at night, making you unable to see the front well.**
- **When you check the wipers, be sure to lift the driver seat side wiper arm up first and then lift the front passenger seat side wiper arm up.**
- **When you lift the driver seat side wiper arm up, it may interfere with the front passenger seat side wiper arm, but that is normal.**

Checking and replacing fuses and relays

If an electrical system does not operate normally, check the relevant fuse first. If the fuse is blown, replace it with a fuse of the same capacity.

Warning

- **Not using a bulb or using a bulb with the capacity that does not meet the specifications or modifying the HID bulb or LED lamp wiring arbitrarily may cause the fuse disconnection, malfunction or damage other wiring-related devices.**

Caution

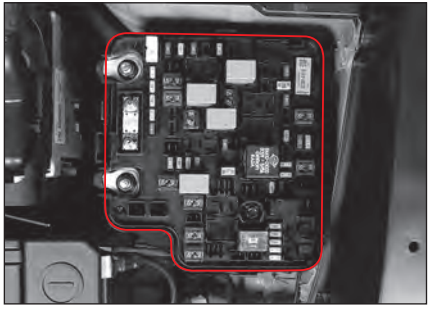
- **Removing a fuse while the electricity is being supplied may damage the relevant electrical system. Be sure to replace a fuse after turning off all electrical systems and the engine.**
- **Replace the fuse with a new one of the same capacity that meets the specifications.**
- **If the replaced fuse is blown continuously, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.**

Notice

- **Refer to the label attached to the fuse and relay box cover for the capacity and name of fuse.**

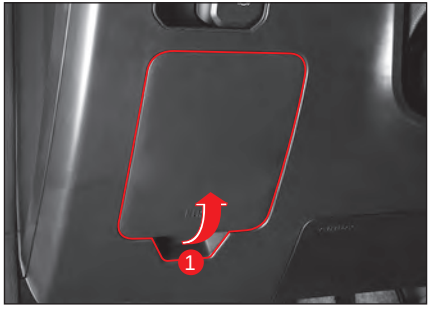
Engine compartment fuse and relay box

Open the engine hood and lift the fuse box cover up with the locking lever (1) in front of the engine room compartment fuse box cover pressed.



Interior fuse box

Open the driver seat door and open the interior fuse box by inserting your finger on the groove of the interior fuse box cover (1) and pulling it.



Checking and replacing fuses

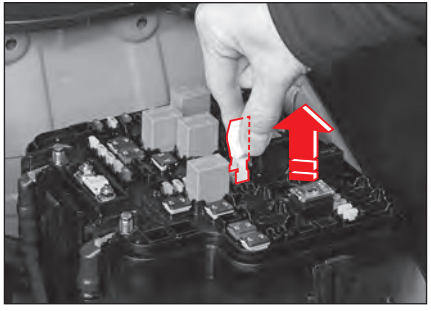
1 Turn off all electrical systems and the engine.

2 Open the cover of the engine compartment fuse box cover or the interior fuse box.

3 Check the relevant fuse by referring to the block diagram of the fuses shown inside of the fuse box cover.

4 Pull out the relevant fuse by using the fuse puller.

The fuse puller is provided in the engine compartment fuse box.



5 Check visually whether the fuse is blown or not.

6 If the fuse is normal, insert it back to its original position.

7 If the fuse is blown, check the capacity indicated on top of the fuse and replace it with a new fuse of the same capacity.

Fuse with higher capacity

Fuse with the prescribed capacity

Normal

Disconnected

Warning

- **Using steel wire, copper wire or aluminum foil instead of the fuse may cause a fire due to the overload of the electrical system. Always use a fuse with the prescribed capacity.**
- **Never use a fuse with a capacity higher than the prescribed capacity indicated on the fuse and relay box since a fuse with higher capacity may damage electrical systems or cause a fire.**
- **When the fuse is disconnected, use a normal fuse with the prescribed capacity.**

Notice

- **Spare fuses for each capacity are provided in the fuse and relay box. If you use a spare fuse, replenish with a new one immediately. The capacity is indicated on top of the fuse.**

Specifications of lamps and checking

Specifications and quantity of lamps and bulbs

Classification			Quantity	Specifications
Exterior lamp (front side of the vehicle)	Head lamp	High beam	-	LED
		Low beam	-	LED
		Sidelight/daytime running light (DRL)	-	LED
		Turn signal	-	LED
	Front fog light		-	LED
	Side repeater		-	LED
Exterior lamp (rear side of the vehicle)	Rear lamp	Stop lamp	-	LED
		Tail light/Stop lamp	-	LED
		Backup lamp	2	W16W
		Turn signal	2	PY21W
	License plate lamp		2	W5W
	High mounted stop lamp		-	LED
	Rear fog lamp		-	LED

Classification			Quantity	Specifications
Interior lamp	Front room lamp	LED	-	LED
		Bulb	2	10W
	Center room lamp	LED	-	LED
		Bulb	2	8W
	Luggage room lamp	LED	-	LED
		Bulb	1	5W
	Sun visor/mirror lamp		2	5W
	Glove box lamp		1	5W
	Dashboard mood lamp (front passenger seat side)		-	LED
	Front door mood lamp		-	LED

Checking the lamps

Operate the ON/OFF switch of various lamps to see if the lamp turns on or off normally.

If the lamp does not turn on, check the lamp in the following order and replace the relevant part if it is abnormal.

- Fuse
- Bulb

If the fuse and the bulb are normal, have your vehicle checked and serviced at a KG Mobility Authorized Service Center.

Headlamp desiccant*

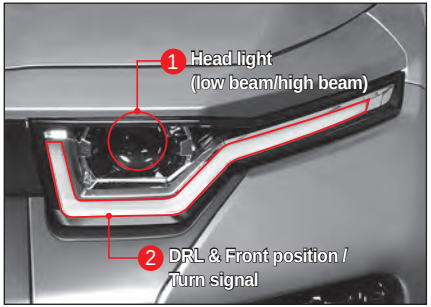
A consumable desiccant is included in the headlamp (high beam/ low beam / turn signal / side lamp and daytime running lamp) to mitigate fogging due to moisture. An inside fogging problem lasts for a longer period of time, have the system checked and serviced by a KG Mobility Authorized Service Center.

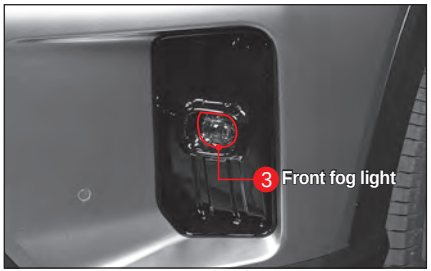
Caution

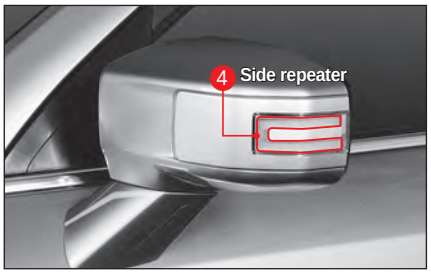
- **Only use a bulb with the prescribed capacity when replacing the lamp.**
- **Be sure to disconnect the negative (-) battery cable or turn off the engine before replacing the lamp.**
- **Removing the lamp cover forcibly may damage the lamp cover so that it may not be used again, so caution should be taken when removing the lamp cover.**
- **Before replacing a bulb, be sure to turn off the relevant lamp and the engine.**
- **Do not touch the bulb with your hands during or right after bulb operation since there is a possibility of a burn.**
- **Holding the glass part of the bulb with your hand may leave a fingerprint, dust or moisture on the bulb, reducing its life or exploding it. In such case, wipe the glass part with a soft cloth.**
- **Be sure to have the aiming angle of the head lamp adjusted by a KG Mobility Authorized Service Center.**
- **The internal surface of the head light and braking light lamp may be fogged temporarily under conditions such as rain or car washing. This is dew condensation according to a temperature difference between the inside and the outside of the lamp and it is not a functional problem. However, if water enters into the lamp or a large water drop occurs inside the lamp, contact a KG Mobility Authorized Service Center.**

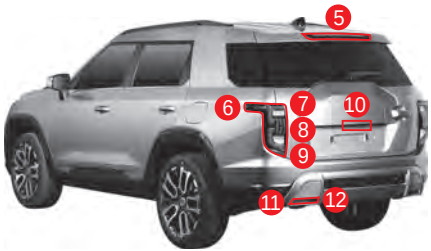
- **To replace an exterior lamp bulb, visit a KG Mobility Authorized Service Center.**
- **Only use appropriate tools and bulb of specified capacity when replacing different lamps. If you do not have a bulb available or are not familiar with how to replace it, please visit our nearest KG Mobility Authorized Service Center for service.**
- **Be sure to replace it with a new lamp (same capacity and color) that fits the lamp type. Failure to do so may result in a blown fuse or lamps malfunction and damage (open circuit / short circuit / fire) to other wiring related devices.**
- **Fingerprint, dust, or moisture stuck to bulb may shorten a bulb life or cause a bulb bursting. In this case, wipe the bulb glass with a soft cloth.**
- **If the inside of the lamp is damp, it is removed by driving the vehicle after the lamp is turned on, and the level of moisture removal may vary depending on the conditions of the lamp (size / position / environment, etc.). If moisture is not constantly removed, have your vehicle checked and serviced at a nearest KG Mobility Authorized Service Center.**

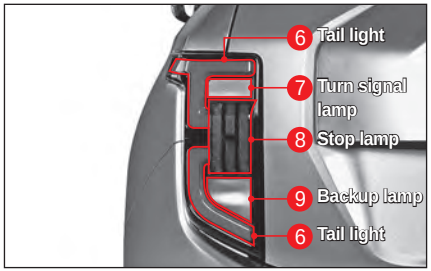
Position of exterior lights and lamps

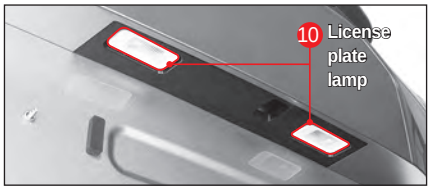


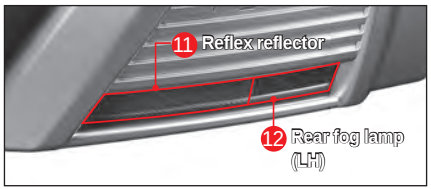












Replacing exterior lamps

All lamps except for the following lamps should be checked and replaced at a nearby KG Mobility Authorized Service Center.

- Rear turn signal lamp
- Backup lamp

Warning

- **Replacing with a lamp that does not meet the specifications may cause the disconnection of a fuse, malfunction or a fire.**
- **Before replacing the lamp, park the vehicle at a safe place, turn off the engine and disconnect the negative (-) battery cable. (After connecting the battery again, reset some functions of the vehicle.)**
- **Do not touch the bulb with your hands during or right after bulb operation since there is a possibility of a burn.**

Caution

- **When you install the lamp again after replacing it, install the socket firmly to the hole by turning it clockwise.**
- **Be sure to use genuine parts for the lamp.**
- **Do not install an additional lamp or LED for the lamps installed previously on the vehicle.**

Replacement of headlamp desiccant

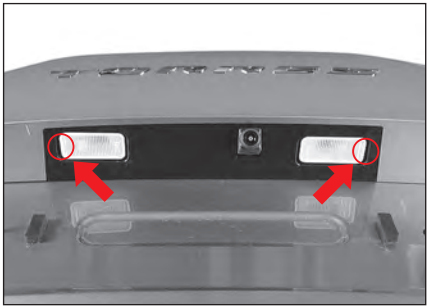
If the headlamp condensation problem persists, please replace the desiccants.

Headlamp absorbent*

A consumable desiccant is included in the headlamp (high beam/ low beam / turn signal / side lamp and daytime running lamp) to mitigate fogging due to moisture. An inside fogging problem lasts for a longer period of time, have the system checked and serviced by a KG Mobility Authorized Service Center.

To replace license plate lamp

1 Unscrew the license plate mounting screws.



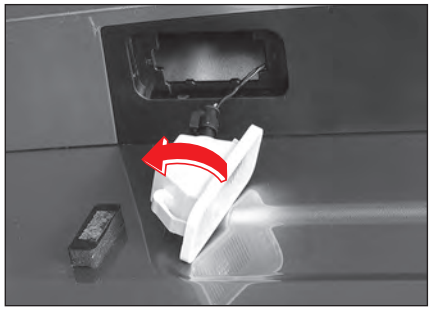
2 Remove the license plate assembly.

Caution

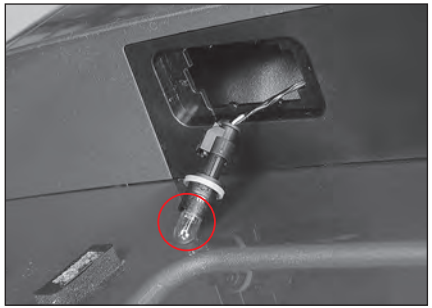
- **Be careful not to damage the vehicle body and the rear combination assembly.**

6

3 Turn the license plate assembly clockwise to remove the bulb socket.

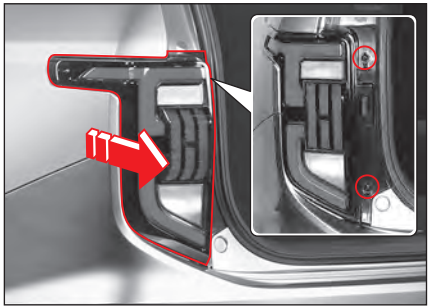


4 Remove the license plate from the socket and replace it with new one with right specifications.



5 Once replacement is completed, assemble the lamp in reverse order of removal.

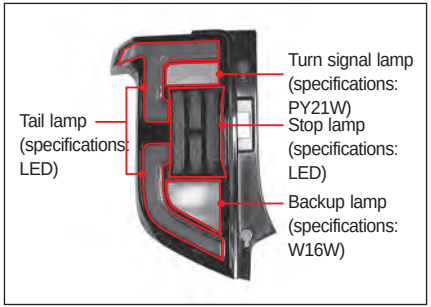
To Replace Rear Combination Lamp



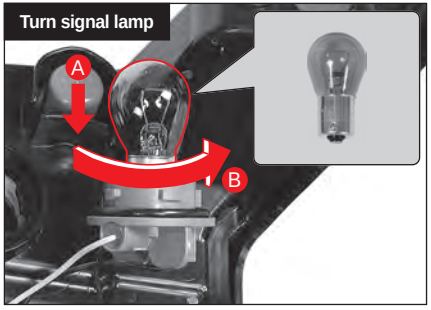
1 Disconnect the battery (-) terminal and remove the two mounting screws for the rear combination lamp. Pull the lamp assembly in the direction indicated by the arrow in the picture to disconnect the connector and detach the lamp.

Caution

- **Be careful not to damage the painted surface of the vehicle body or rear combination assembly when removing it.**



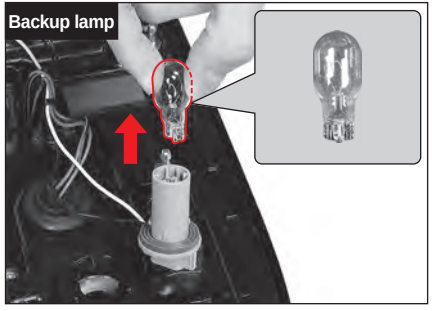
2 Turn the turn signal lamp socket counterclockwise to remove the it.



3 Remove the lamp from the removed socket by rotating the lamp in the direction of the arrow (B) while pressing it in the direction of the arrow (A).

4 Install in the reverse order of removal.

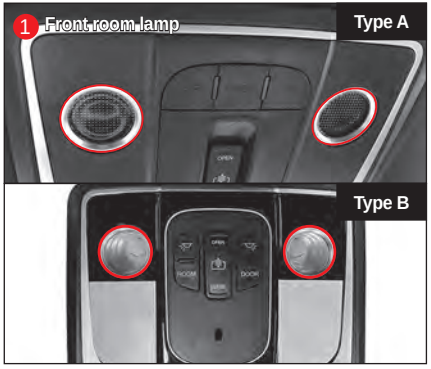
5 Turn the backup lamp socket counterclockwise to remove the it.

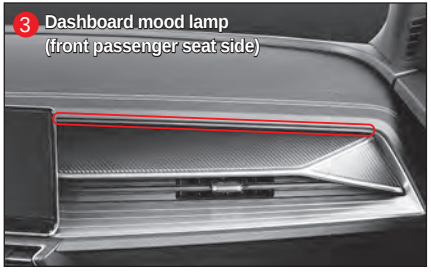


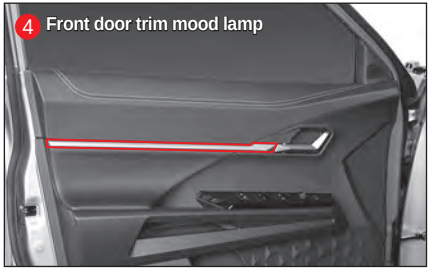
6 Pull out the lamp in the direction of the arrow from the removed socket.

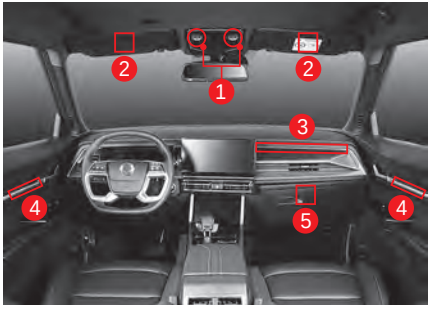
7 Install in the reverse order of removal.

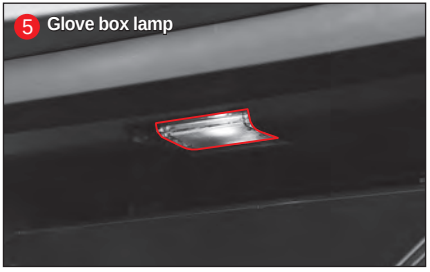
Position of interior lamps





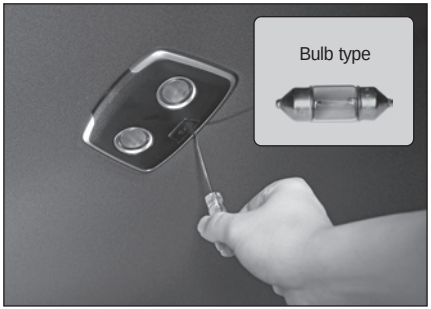






Replacing the interior lamps

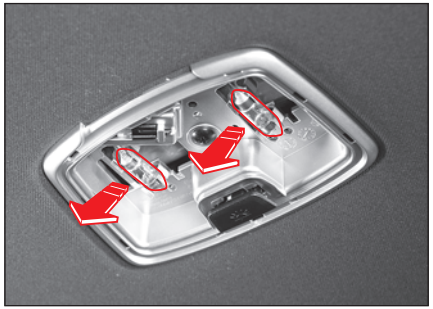
Center Room Lamp (Bulb)



1 Turn the room lamp switch OFF, and remove the cover using a flat bladed screwdriver.

Caution

- **When removing the cover, make sure to remove the front part of the cover first (marked with arrows). If you remove the rear part of the cover first, the cover may be damaged.**

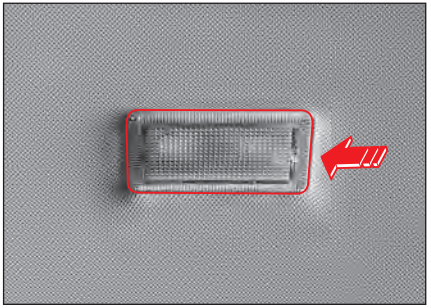


2 Remove the lamp by pulling it down (arrow direction) and replace it with a new one.

3 Fit the cover.

Replacing the sun visor/mirror lamp (Bulb)

1 Turn off the engine and remove the lamp cover using a flat bladed screwdriver.



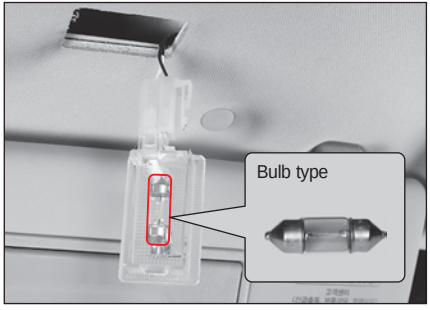
Caution

- **Be sure to remove the lamp cover from the part marked with an arrow first. Removing it from the part on the opposite side first may damage the connector and the cover.**

6

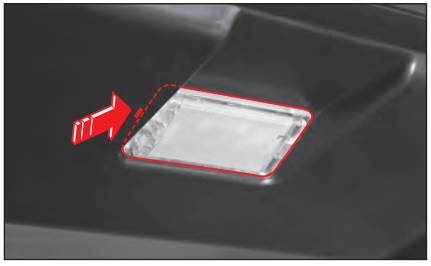
2 Remove the lamp and replace it with a new one.

At this time, avoid leaving a fingerprint or a foreign material on the surface of the bulb.

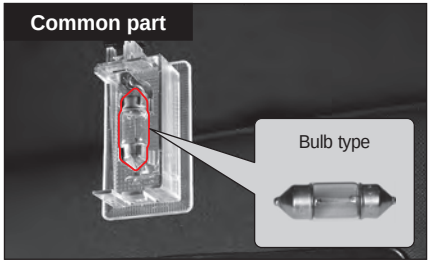


3 After replacing it, install the cover again.

Glove Box Lamp



1 Disconnect the negative battery cable and remove the cover using a flat bladed screwdriver.



2 Remove the lamp.

3 Replace the bulb with a new one. Keep the surface of the bulb free of finger print for foreign matter.

4 Fit the cover.

Caution

- **When removing the cover (sun visor lamp, glovebox lamp, driver/passenger lamp), remove the part with arrow mark first.**
  Otherwise, the cover and connectors can be damaged.

Replacing the A/C filter

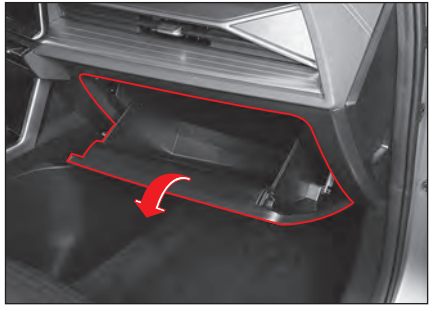
In any of the following cases, replace the A/C filter even if the replacement interval has not come near.

- If an unpleasant smell comes out when you operate the A/C after it is not operated for a long period of time
- If the cooling and heating performance or air blowing performance is lowered

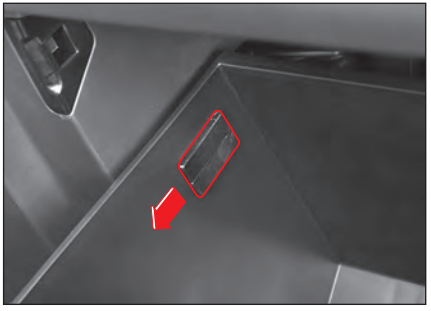
Caution

- **Replace the A/C filter every 15,000 km. However, if the vehicle is driven on a road where the air is heavily polluted, an unpaved road or the A/C and the heater are used excessively, replace the A/C filter earlier than the replacement interval.**
- **If the A/C filter is contaminated, the cooling performance may be lowered and an unpleasant smell may occur when you operate the A/C.**
- **Be careful not to switch the installation direction when replacing the A/C filter.**

1 Open the glove box by pulling the glove box opening lever.



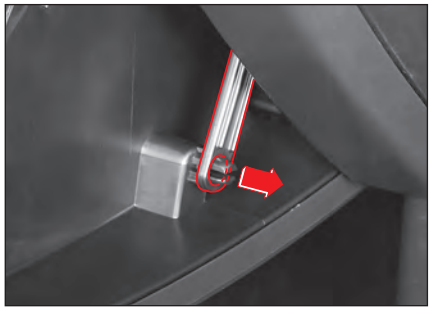
2 Pull the fixing holder on the left side and the right side of the glove box in the arrow direction.



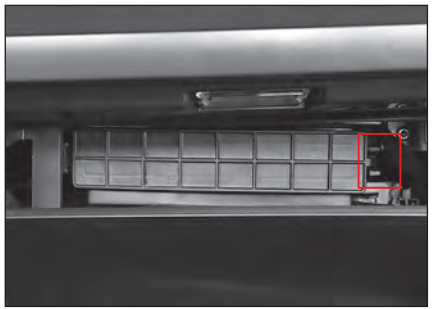
Caution

- **Do not pull the fixing holder of the glove box forcibly. Doing so may cause the fixing holder to deform, and the fixing status of the glove box may be loose when it is installed again.**

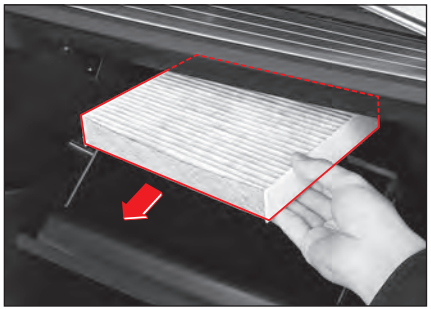
3 Separate the glove box damper clip from the bottom right side of the glove box.



4 Remove the A/C filter cover by pressing the right side of the A/C filter cover.

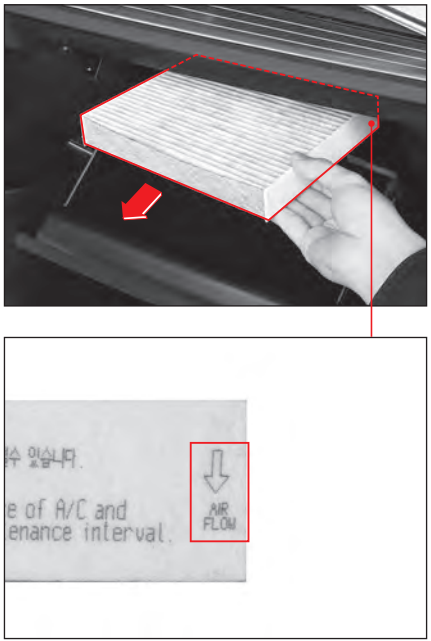


5 Remove the A/C filter.



6 Replace it with a new one.

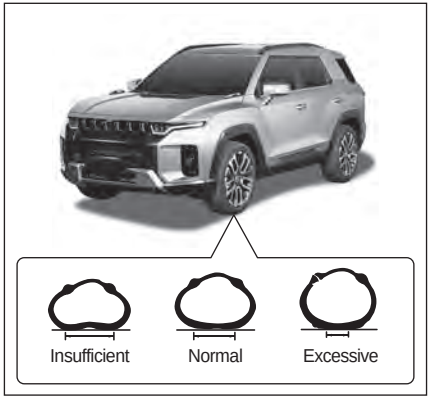
Install it with the “AIR FLOW arrow” facing down.



7 After replacing it, install it in the reverse order of A/C filter removal.

Checking the tire pressure

Check the tire pressure before driving the vehicle or when the tires are cooled down completely.



Caution

- **If the tire pressure is higher or lower than the prescribed value, the riding comfort or steering stability are lowered and the tires are easily damaged and uneven tire wear occurs. Be sure to adjust the tire pressure to the prescribed value.**

Prescribed tire inflation pressure

Classification	Type	Wheel	Tire pressure
Driving tire	225/60R17	6.5JX17	34 psi, (2.3 bar)
	235/55R18	7.5JX18	
	245/45R20	8.0JX20	

Notice

- **The prescribed tire inflation pressure is measured when the tire has been cooled down properly at room temperature. If you need to drive the vehicle on an expressway for a long period of time, increase the tire inflation pressure by 4~5psi from the prescribed value on the table.**

Wheel alignment status and the balance between tires and wheels

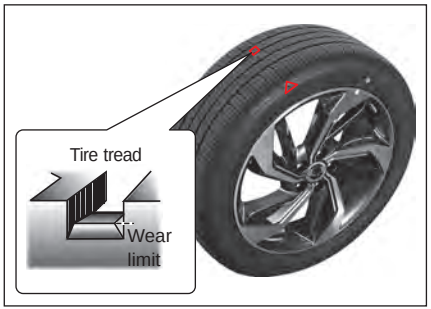
If the wheels are not aligned as prescribed, it leads to uneven or accelerated wear of the tires and causes the vehicle to lead to one side while driving.

If the tires and wheels are not balanced, it may lead to vehicle vibration or uneven wear of tires.

In such case, have your vehicle checked and maintained at a KG Mobility Authorized Service Center.

Checking the status of tire wear

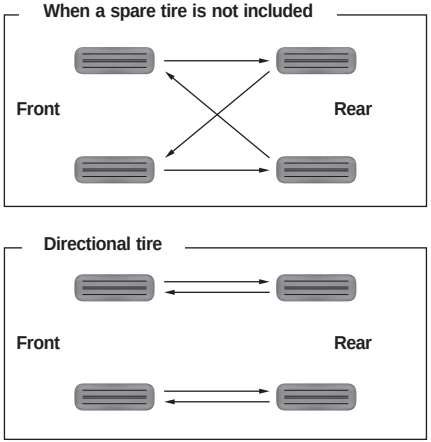
Check the status of tire wear on the contact surface of the tire along the marked part. Replace the tire before the tire tread goes down below the wear limit.



Warning

- **Check the tire for damage or the status of tire wear frequently and replace if necessary.**
- **If the tire is worn excessively, the braking distance may increase or the steering wheel may become heavier. Also, the tire may be blown, resulting in an accident.**

Rotating the tire positions



☞ Refer to "When you have rotated the tires" (p.2-33)

Warning

- **Be sure to replace a tire at a KG Mobility Authorized Service Center or a professional tire shop.**
- **Be sure to install the same manufacturer's tires with the same specifications, not mixing different types of tires.**

Snow tire

Use snow tires in order to drive the vehicle safely on a snowy road or an icy road during winter.

The snow tires should be installed on all 4 wheels.

Warning

- **If the snow tires for driving on a snowy road and an icy road are not installed, drive the vehicle as slowly as possible.**
- **The snow tire with the driving direction arrow on its side wall should be installed according to the driving direction.**
- **The snow tire is manufactured in consideration of the characteristics of road surface during winter. However, it is an auxiliary aid, so be sure to install the snow chains on a snowy road and an icy road and drive the vehicle as slowly as possible for safe driving.**
- **Replace the snow tires with ordinary tires when the winter has passed. Store the snow tires in a cool place with no direct sunlight and be careful not to allow them to come into contact with oil, grease or fuel.**

Tire chain

- Install the tire chains on the rear wheels for a 2-wheel drive vehicle and install the tire chains on both the front and rear wheels for a 4-wheel drive vehicle. If it is impossible, be sure to install the tire chains on the rear wheels.
- In case of a vehicle equipped with aluminum wheels, the wheels may be damaged if the tire chains are used. Therefore, use snow tires instead of the tire chains. If it is impossible, use the wire-type tire chains.
- When the tire chains are installed, drive the vehicle at a prescribed speed recommended by the chain manufacturer or at a speed of 30 km/h or less.
- If you hear a sound of the tire chain hitting the vehicle body, stop the vehicle immediately, check the installation status of the tire chains and tighten the tire chains if necessary.
- Take the tire chains off immediately on a normal road to prevent the chains from being damaged.
- Do not use the tire chains on a normal road, use only on a snowy road or an icy road.

Warning

- **After driving the vehicle with the tire chains installed for a certain distance (0.5~1 km), check the installation status of the tire chains and for any damage to the vehicle body. If the tire chains are loose, tighten them again.**
- **Be sure to use a tire chain that meets the specifications and install it correctly. If the tire chain does not meet the specifications or is installed incorrectly, the vehicle may be damaged or a serious problem in the steerability and safety of the vehicle may occur.**

Cautions for checking the tires and wheels

Caution

- **Be sure to use the same manufacturer's tire with the same specifications for all tires in order to maintain the characteristic of the vehicle safely.**
- **Be sure to check the status of tire wear and the tire pressure before driving the vehicle.**
- **The tire pressure and tightening status of tire wheel nuts should be checked frequently. Be sure to check the vehicle condition, tire pressure and the tightening status of tire wheel nuts before driving the vehicle for a long distance.**
- **Only use the same manufacturer's tires that meet the specifications. If the tire that does not meet the specifications when installed, you cannot operate the steering wheel normally, the fuel consumption may increase and the driving system or braking system of the vehicle may become abnormal. In addition, the vibration of the steering wheel and uneven tire wear may occur when you drive the vehicle at a high speed.**
- **Installing a tire that does not meet the specifications or a retreaded tire voids the warranty repair.**

- **Check the tires and wheels always before driving the vehicle. If the wheels are damaged, the tire pressure may decrease and the tires may be damaged.**
- **If a tire has been impacted by a stone or any other objects while driving, have your vehicle checked and serviced at a KG Mobility Authorized Service Center immediately.**
- **Do not mix the tires and wheels installed when the vehicle was shipped with other tires and wheels. Doing so may affect the driving stability of the vehicle, causing an accident.**
- **Check the status of the emergency tire service kit. Always check the operation status of the compressor and the preparation of sealant.**
- **Be sure to check and add the tire pressure before driving the vehicle for a long period of time or at a high speed. Driving the vehicle at a high speed with low tire pressure may cause the tires to burst due to the standing wave effect, resulting in a risk such as a rollover.**

Various unfit elements for driving occur on a road in winter, so make sure to prepare in advance in order to respond properly.

Starting the engine and driving the vehicle

During winter, the resistance of the power train in the engine increases and the performance of the battery and the starting motor is lowered so that the engine may not be started smoothly. Start the engine in a proper way.

After starting the engine, allow enough time to warm it up before driving the vehicle. It will increase the engine's life expectancy and ensure smooth driving.

Caution

- **Replace the engine oil and the fuel filter according to their replacement intervals. A decrease in flowability and the clogging of the fuel filter and the oil filter due to the contamination of engine oil may become an obstacle to starting the engine in winter.**
- **Do not add additives such as white kerosene or alcohol besides the genuine fuel arbitrarily in order to improve the startability. Doing so may damage the engine and relevant parts or cause excessive exhaust gas emission due to inadequate lubrication of important parts inside of the fuel system and different characteristics such as flash point.**
- **Be sure to preheat a diesel-powered vehicle before starting the engine.**

Managing the engine oil

This vehicle is shipped after it is filled with 4-season engine oil. If the replacement interval has not come, you do not need to change the engine oil.

Managing the engine coolant

Be sure to check the concentration of coolant before the temperature begins to drop.

Normal concentration of coolant is a mixture of water and antifreeze at the ratio of 50:50.

If only water has been added to the vehicle without antifreeze when replenishing the coolant, the coolant may freeze, damaging the engine and the cooling system seriously when the temperature drops below 0°C.

Caution

- **When adding or replacing the coolant, be sure to use a mixture of water and antifreeze at the ratio of 50:50.**
- **Use only the KG Mobility genuine antifreeze for the coolant.**

Notice

- **This vehicle is shipped after it is filled with 4-season antifreeze.**

Managing washer fluid

Use only genuine washer fluid that does not freeze in cold weather.

If the washer fluid freezes due to the use of a non-standard washer fluid it may damage the washer motor and interfere with safe driving.

Installing a snow tire

It is recommended to replace the tires with snow tires during winter in order to prevent the vehicle from slipping on a snowy road or an icy road.

Caution

- **Drive the vehicle at a lower speed than usual if the snow tires are installed.**
- **Install the tire chains in a correct way. Failure to do so may damage the wheel house or the vehicle body.**

Managing the A/C

If the A/C is not used for a long period of time, the lubrication inside the A/C is not carried out. As a result, the packing inside of the A/C may be hardened that may lead to refrigerant leak and malfunction due to rusting.

It is recommended to operate the A/C for 5 to 10 minutes once a week regardless of season in order to maintain the performance of the A/C continuously.

Caution

- **Do not remove the refrigerant in winter even if the A/C is not used.**

Other maintenance

- Prepare sand bags, snow chains, shovel, gloves and old clothes in the vehicle in advance in preparation for driving the vehicle in the countryside or heavy snow.
- Do not drive too fast, accelerate or brake or steer the vehicle suddenly on a snowy road or an icy road.
- When you drive the vehicle on a snowy road or an icy road, keep a safe distance twice as long as usual from a preceding vehicle and downshift to use the engine brake effect properly when you stop the vehicle.
- Do not operate the wiper when it is frozen. Doing so may overload, damaging the wiper motor.
- When you drive the vehicle on a snow-covered road, a large amount of snow may build up under the wheel house, making it difficult for you to operate the steering wheel, so check and remove it frequently.
- When you have passed a road where calcium chloride is sprayed, wash your vehicle as soon as possible to prevent the bottom part of the vehicle from being corroded.
- If you park the vehicle in a snowy place, the brake system may froze, reducing the braking force while driving. In such case, depress the brake pedal frequently while driving the vehicle at a low speed, restoring the braking force, and then drive the vehicle normally.
- Do not start off in the vehicle forcibly while the parking brake is frozen. Doing so may damage the vehicle. Be sure to start off in the vehicle after the parking brake has melted.

Cautions for parking during winter

- When the temperature falls down below zero, the parking brake may not be released due to the freezing of EPB-related devices.
- When you park the vehicle on a flat and safe place in weather with below zero temperatures, use a chock on the wheels after parking instead of using the EPB.
- If the vehicle is parked/stopped while idling for a long time after starting the engine in cold weather, the water vapor in the exhaust gas condenses and accumulates inside the exhaust pipe. The accumulation of water inside the exhaust pipe can cause noise. However, it is discharged during medium- and high-speed driving.
- When you park the vehicle in weather with below zero temperatures, moisture remaining in the exhaust pipe might have frozen. This is a normal state of the vehicle. Do not depress the accelerator pedal or idle the engine for a long period of time in order to remove frozen moisture.

Warnings for self-maintenance

When the vehicle is checked and serviced by the driver, proper knowledge and special attention are necessary for preventing injury and damage to the vehicle.

Warning

- **After driving the vehicle, the systems including the engine, radiator, exhaust manifold, catalyst converter and exhaust pipe (muffler) are very hot, so caution should be taken when checking the engine room. Turn off and cool down the engine properly before checking in order to prevent a burn.**
- **Be sure to turn off the engine, place the gear shift lever in the P (parking) position and apply the parking brake when checking the vehicle.**
- **Be sure to turn off the engine when checking the vehicle in a garage or a poorly ventilated space.**
- **Do not smoke when checking the battery, fuel-related parts or the washer fluid. Do not check the battery, fuel-related parts or the washer fluid in a place where flames or sparks occur easily.**
- **Do not connect or disconnect the battery when the START/STOP switch is in the ON position.**
- **When you connect battery cables, be careful not to switch the positive and negative cables.**
- **The battery cables and the wires in the vehicle transfer high current and voltage. Be careful of a short circuit.**
- **Keep the used oils, coolant and other fluids out of children's reach. (Ask a professional company for disposal.)**
- **The cooling fan may spin even if the engine is not running. Separate the negative battery cable when you check the vehicle near the cooling fan or the radiator.**
- **Check the level of various oils and coolant daily. Driving the vehicle with insufficient oils or coolant may damage the vehicle which is not subject to warranty repair.**
- **Be sure to use genuine parts for replacing consumable parts.**
- **When you add any oil or coolant, be careful for the oil or coolant not to come into contact with your body, clothes or the painted surface of the vehicle. If it comes into contact with your body, wash it off immediately and consult your doctor.**
- **Adding more oil or coolant than the prescribed level may damage the systems. Always add a proper amount of oil or coolant.**
- **When you inject or add any oil or fluid, do not allow foreign materials such as moisture or dust to enter. Failure to do so may lower the vehicle performance and make normal functions inoperable, causing an accident while driving.**
- **When a long period of time has passed even if the mileage is low, the level of oils or coolant may become low. Check it frequently and add it if necessary.**
- **Used oils, coolant and other solutions and containers should not be discarded with household waste. Discard oils, coolant and other solutions according to a legitimate disposal procedure.**

Index

You can conveniently find important functions or terms from the content of this owner’s manual in alphabetical order.

A

B

C

D

E

F

G

H

I

K

L

M

N

O

P

R

S

T

U

V

W

No.	PART NO.	CODE NO.	PRINTING DATE	MODEL	REMARKS
1	J101OM2305E	TR1-3OM5E-3E-300A	May. 01, 2023	J101	EU

TORRES (LHD)
OWNER'S MANUAL

ISSUED BY
EXPORT SERVICE TEAM
KG Mobility Corporation

455-12, Dongsak-ro, Pyeongtaek-si,
Gyeonggi-do, 17749, Korea

TELEPHONE : 82-80-500-5582
FACSIMILE : 82-31-610-3762