## **OWNER'S MANUAL**

Operation
Maintenance
Specifications

All information in this Owner's Manual is current at the time of publication. However, HYUNDAI reserves the right to make changes at any time so that our policy of continual product improvement may be carried out.

This manual applies to all models of this vehicle and includes descriptions and explanations of optional as well as standard equipment.

As a result, you may find material in this manual that does not apply to your specific vehicle.

# CAUTION: MODIFICATIONS TO YOUR HYUNDAI

Your HYUNDAI should not be modified in any way. Such modifications may adversely affect the performance, safety or durability of your HYUNDAI and may, in addition, violate conditions of the limited warranties covering the vehicle. Certain modifications may also be in violation of regulations established by the Department of Transportation and other government agencies in your country.

#### SAFETY MESSAGE

Your safety, and the safety of others, are very important. This Owner's Manual provides you with many safety precautions and operating procedures. This information alerts you to potential hazards that may hurt you or others, and may damage your vehicle.

Safety messages found on vehicle labels and in this manual describe these hazards and what to do to avoid or reduce the risks.

Warnings and instructions contained in this manual are for your safety. Failure to follow safety warnings and instructions can lead to serious injury or death.

Throughout this manual WARNING, CAUTION, NOTICE, and the SAFETY ALERT SYMBOL <u>A</u> will be used.

Obey all safety messages that follow this symbol to avoid possible injury or death.



#### WARNING

WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.



#### CAUTION

CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

#### NOTICE

NOTICE indicates a situation that, if not avoided, could result in vehicle damage.

## HYUNDAI VEHICLE OWNER PRIVACY POLICY

Your Hyundai vehicle may be equipped with technologies and services that use information collected, generated, recorded or stored by the vehicle. Hyundai has created a Vehicle Owner Privacy Policy to explain how these technologies and services collect use and share this information.

You may read our Vehicle Owner Privacy Policy on the Hyundaiusa.com website at: https://www.hyundaiusa.com/owner-privacy-policy.aspx

If you would like to receive a hard copy of our Vehicle Owner Privacy Policy, please contact the Hyundai Customer Care Center at:

Hyundai Customer Care

P.O. Box 20850

Fountain Valley, CA 92728

800-633-5151

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Hyundai's Customer Care representatives are available Monday through Friday, between the hours of 6:00 AM and 5:00 PM PST and Saturday between 6:30 AM and 3:00 PM PST (English).

For Customer Care assistance in Spanish or Korean, representatives are available Monday through Friday between 6:30 AM and 3:00 PM PST.

### HYUNDAI MOTOR AMERICA

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## 1. Introduction

Congratulations, and thank you for choosing HYUNDAI. We are pleased to welcome you to the growing number of discerning people who drive HYUNDAI. We are very proud of the advanced engineering and high quality construction of each HYUNDAI we build.

Your Owner's Manual will introduce you to the features and operation of your new HYUNDAI. To become familiar with your new HYUNDAI, so that you can fully enjoy it, read this Owner's Manual carefully before driving your new vehicle.

This manual contains important safety information and instructions intended to familiarize you with your vehicle's controls and safety features so you can safely operate your vehicle.

This manual also contains information on maintenance designed to enhance safe operation of the vehicle. It is recommended that all service and maintenance on your car be performed by an authorized HYUNDAI dealer. An authorized HYUNDAI dealer are prepared to provide high-quality service, maintenance, and any other assistance that may be required.

You may download an electronic version of this manual from owners.hyundaiusa.com.

Congratulations, and thank you for choosing HYUNDAI. We are very proud of the advanced engineering and high guality construction of each HYUNDAI we build.

This Abridged Owner's Manual will introduce you to the features and operation of your new HYUNDAI. To become familiar with your new HYUNDAI, you should download and read the complete Owner's Manual from MyHyundai.com before driving your new vehicle.

The complete Owner's Manual contains additional important safety information and instructions intended to familiarize you with your vehicle's controls and safety features so you can safely operate your vehicle. The Owner's Manual also contains additional information about the maintenance for your vehicle. It is recommended that all service and maintenance on your vehicle be performed by an authorized HYUNDAI dealer. Authorized HYUNDAI dealers are prepared to provide high-quality service, maintenance and any other assistance that may be required.

This Abridged Owner's Manual should be considered a permanent part of your vehicle, and should be kept in the vehicle so you can refer to it at any time. This manual should stay with the vehicle if you sell it to provide the next owner with important operating, safety and maintenance information.

You may download an electronic copy of the complete version of the Owner's Manual from MyHyundai.com.

If you have any questions regarding the operation of your vehicle, please contact the Hyundai Customer Care Center. Hyundai's Customer Care Center representatives are available Monday through Friday, between the hours of 6:00 AM and 5:00 PM PST and Saturday between 6:30 AM and 3:00 PM PST (English). For Customer Care assistance in Spanish or Korean, representatives are available Monday through Friday between 6:30 AM and 3:00 PM PST.

## **Vehicle Modifications**



## **MARNING**

If you use unauthorized electronic devices, it may cause the vehicle to operate abnormally, wire damage, battery discharge, and fire. For your safety, do not use unauthorized electronic devices.

#### NOTICE

Some vehicle interior sounds (including welcome chime, navigation alerts, or warning chimes) may be generated from the interior speakers or amplifier. Do not replace these components with anything other than the original Hyundai factory parts. Any unauthorized product may cause a malfunction of the vehicle interior sounds that may affect the intended operation of the vehicle.

## Two-way radio or cellular

Your vehicle is equipped with a Tire Pressure Monitoring System, Passenger Occupant Classification System and other CAN bus systems. It is possible for an improperly installed/adjusted high powered two-way radio to adversely affect electronic systems. For this reason, carefully follow the radio manufacturer's instructions if you choose to install one of these devices.

## **Vehicle Handling Instructions**

Specific design characteristics (higher ground clearance, track, etc.) give this vehicle a higher center of gravity than other types of vehicles. In other words they are not designed for cornering at the same speeds as conventional 2-wheel drive vehicles. Avoid sharp turns or abrupt maneuvers. Failure to operate this vehicle correctly may result in loss of control, a collision or vehicle rollover. For more information, refer to the 'Reducing the Risk of a Rollover' section in chapter 3.

# 2. Picture Index

This chapter shows the names of the vehicle components and the locations of the control systems.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to your vehicle.

## **Exterior Overview (Front View)**

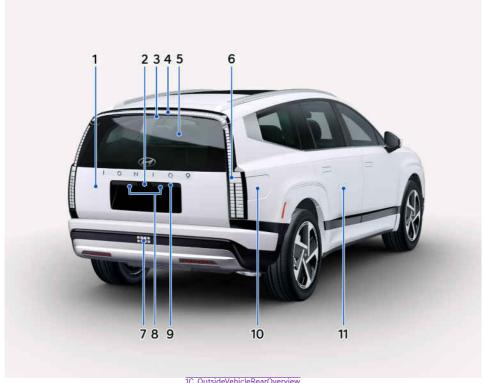


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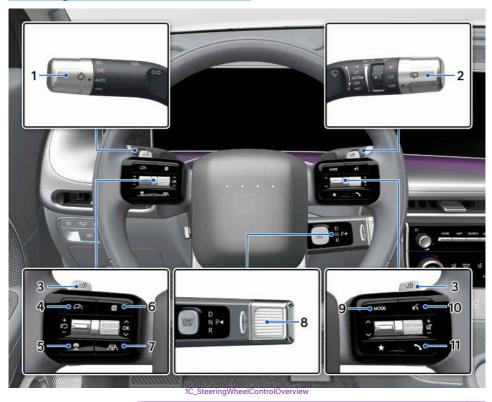


1C\_CenterInsideVehicleOverview

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## **Motor Compartment Overview**

For more information, refer to the 'Motor Compartment' section in chapter 9.

# 3. Seats & Safety System

This chapter explains how to use the seats and safety systems installed in the vehicle.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to your vehicle.
- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

## **Important Safety Precautions**

You will find many safety precautions and recommendations throughout this section, and throughout this manual. The safety precautions in this section are among the most important.

### **Always Wear Your Seat Belt**

A seat belt is your best protection in all types of collisions. Airbags are designed to supplement seat belts, not to replace them. Even though your vehicle is equipped with airbags, always make sure you and your passengers wear your seat belts, and wear them properly.

#### **Restrain All Children**

All children under age 13 should ride in your vehicle properly restrained in a rear seat, not the front seat. Infants and small children should be restrained in an appropriate Child Restraint System. Larger children should use a booster seat with the lap/shoulder belt until they can use the seat belt properly without a booster seat.

## **Airbag Hazards**

While airbags can save lives, they can also cause serious or fatal injuries to occupants who sit too close to them, or who are not properly restrained. Infants, young children, and short adults are at the greatest risk of being injured by an inflating airbag. Follow all instructions and warnings in this manual.

#### **Driver Distraction**

Driver distraction presents a serious and potentially deadly danger, especially for inexperienced drivers. Safety should be the first concern when behind the wheel and drivers need to be aware of the wide array of potential distractions, such as drowsiness, reaching for objects, eating, personal grooming, becoming distracted from other passengers, and using mobile phones.

Drivers can become distracted when they take their eyes and attention off the road or their hands off the wheel to focus on activities other than driving. To reduce your risk of distraction and a collision:

Set up your mobile devices (for example, MP3 players, phones, navigation units, etc.)
 ONLY when your vehicle is safely stopped and parked.

- ONLY use your mobile device when allowed by laws and conditions permit safe use. NEVER text or email while driving. Most states have laws prohibiting drivers from texting while driving. Some states and cities also prohibit drivers from using handheld phones while driving.
- NEVER let the use of a mobile device distract you from driving. You have a responsibility to your passengers and others on the road to always drive safely, with your hands on the wheel as well as your eyes and attention on the road.

## **Never Drink or Take Drugs and Drive**

Drinking alcohol or taking drugs can reduce your ability to respond to changing conditions and emergencies. Do not drink or take drugs and drive, and do not let others drink or take drugs and drive.

### **Control Your Speed**

Excessive speed is a major factor in crash injuries and deaths. Generally, the higher the speed, the greater the risk, but serious injuries can also occur at lower speeds. Never drive faster than is safe for current conditions, regardless of the maximum speed posted.

## Keep Your Vehicle In Proper Operating Condition - Inspecting Your Tires

Having a tire blowout or a mechanical failure can be extremely hazardous. To reduce the possibility of a tire hazard while driving, check your tire pressures regularly and also inspect the condition of your tires (tread depth, uneven wear, etc.). Be sure to perform all regularly scheduled maintenance as indicated in your Owner's Manual.

## Reducing the Risk of a Rollover

Your multi-purpose passenger vehicle is defined as a Sports Utility Vehicle (SUV). Some SUVs have higher ground clearance and a narrower track to make them capable of performing in a wide variety of off-road applications. The specific design characteristics can give them a higher center of gravity than ordinary passenger vehicles making them more likely to roll over if you make abrupt turns. SUVs have a significantly higher rollover rate than other types of vehicles. Always make sure you and your passengers wear your seat belts properly and securely. In a rollover crash, an unbelted person is significantly more likely to be seriously injured or killed than a person wearing a seat belt.

There are steps that a driver can make to reduce the risk of a rollover. If at all possible, avoid sharp turns or abrupt maneuvers, do not load your vehicle with heavy cargo on the roof, and never modify your vehicle in any way.



#### WARNING

- Fasten your seat belt properly. In a rollover crash, an unbelted person is significantly more likely to be seriously injured or killed than a person wearing a seat belt.
- Some SUVs can have a significantly higher rollover rate than other types of vehicles. To prevent rollovers or loss of control:
  - Take corners at slower speeds than you would with a passenger vehicle.
  - Avoid sharp turns and abrupt maneuvers.
  - Do not modify your vehicle in any way that you would raise the center of gravity.
  - Keep tires properly inflated.
  - Do not carry heavy cargo on the roof.

## **Seats Overview**

## **Safety Precautions**

Adjusting the seats so that you are sitting in a safe and comfortable position plays an important role for the safety of the driver and passengers, as much as seat belts and airbags when in a collision.



## WARNING

Do not use a cushion that reduces friction between the seat and the passenger. The passenger's hips may slide under the lap portion of the seat belt during a collision or a sudden stop.

Serious or fatal internal injuries could result because the seat belt cannot operate properly.

## Airbags

You can take steps to reduce the risk of being injured by an inflating airbag. Sitting too close to an airbag greatly increases the risk of injury in the event the airbag inflates.

The National Highway Traffic Safety Administration (NHTSA) recommends that drivers allow at least 10 in. (25 cm) between the center of the steering wheel and their chest.



#### ▲ WARNING

To reduce the risk of serious injury or death from an inflating airbag:

- Adjust the driver's seat as far to the rear as possible while maintaining your ability to control the vehicle.
- Adjust the front passenger seat as far to the rear as possible.
- · Hold the steering wheel by the rim with your hands at the 9 o'clock and 3 o'clock positions to minimize the risk of injuries to your hands and arms.
- Never place anything or anyone between you and the airbag.
- Do not allow the front passenger to place feet or legs on the dashboard to minimize the risk of leg injuries.

#### Seat belts

Always fasten your seat belt before starting any trip. At all times, passengers should sit upright and be properly restrained with a seat belt. Infants and small children must be restrained in appropriate Child Restraint Systems. Children who have outgrown a booster seat and adults must be restrained using the seat belts.



To prevent serious injury or death:

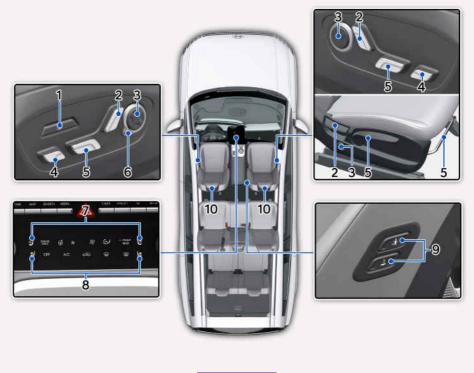
- · Never use one seat belt for more than one occupant.
- Always position the seatback upright with the lap portion of the seat belt snug and low across the hips.
- · Never allow children or small infants to ride on a passenger's lap.
- Do not route the seat belt across your neck, across sharp edges, or reroute the shoulder strap away from your body.
- Do not allow the seat belt to become caught or jammed.

#### **Seats Control Overview**

Familiarize yourself with seat control switches and adjust the seat position, angle, height, etc., before driving.

• When adjusting the seat, refer to the 'Safety Precautions' section in this chapter.

#### Front seats



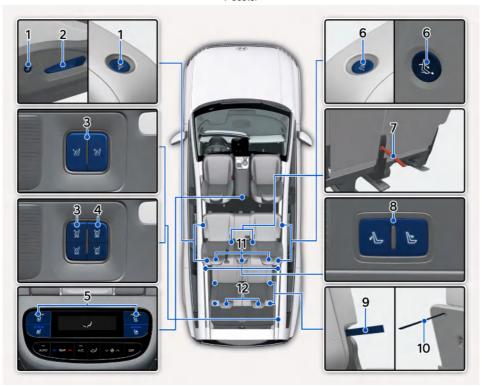
1C\_FrontSeatOverview

- 1. Relaxion comfort seat (if equipped)
- 2. Seatback angle
- 3. Lumbar support

- 4. Leg support or cushion support (if equipped)
- 5. Forward or rearward/seat cushion height/seat cushion angle (if equipped)
- 6. Seatback bolster (if equipped)
- 7. Front seat warmers
- 8. Front air ventilation seats (if equipped)
- 9. Walk-in seat switch (if equipped)
- 10. Head restraint

#### Rear seats

7-Seater



1C\_RearSeatOverview\_1

- 1. Walk-in seat switch
- 2. Seatback angle/seatback folding
- 3. 2nd row seatback folding
- 4. 3rd row seatback folding
- 5. 2nd row seat warmers/2nd row air ventilation seats
- 6. Walk-in switch
- 7. Emergency strap folding
- 8. 3rd row seatback angle (power adjustment)
- 9. 3rd row seatback angle (manual adjustment)

- 10.3rd row seatback folding
- 11. 2nd row head restraint
- 12. 3rd row head restraint

#### 6-Seater (Power adjustment)



1C\_RearSeatOverview\_2

- 1. 2nd row seat warmers/2nd row air ventilation seats
- 2. Walk-in switch
- 3. Seatback angle/Seatback folding
- 4. Forward or rearward/Seat cushion angle
- 5. Leg support
- 6. Emergency strap folding
- 7. 3rd row seatback angle
- 8. 2nd row seatback folding/unfolding
- 9. 3rd row seatback folding/unfolding
- 10.2nd row head restraint
- 11. 3rd row head restraint

## **INFORMATION**

Select **Setup** > **Vehicle** > **Seat** from the Settings menu in the infotainment system, you may use various convenience functions.

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

## **Adjusting Front Seats**

Before driving, adjust the seat to the proper position so that you can easily control the steering wheel, foot pedals and controls on the instrument panel.



## WARNING

To prevent serious injury or death:

- Never attempt to adjust the seat while the vehicle is moving. The seat could respond with unexpected movement and may cause loss of vehicle control resulting in a collision.
- · Do not place anything under the front seats. Loose objects, including unsecured floor mats, in the driver's foot area could interfere with the operation of the foot pedals.
- Do not allow anything to interfere with the normal position and proper locking of the seatback.
- Do not place a cigarette lighter on the floor or seat.
- Use extreme caution when picking up small objects trapped under the seats or between the seat and the center console. Your hands might be cut or injured by the sharp edges of the seat mechanism.
- If there are occupants in the rear seats, be careful while adjusting the front seat.
- Make sure that the seat is locked in place after the adjustment. If not, the seat might move unexpectedly.
- · Never ride with a reclined seatback when the vehicle is moving.
- Riding with a reclined seatback increases your chance of serious or fatal injuries in the event of a collision or sudden stop.
- Driver and passengers should always sit well back in their seats, properly belted, and with the seatbacks upright.



#### CAUTION

To prevent injury:

- Do not adjust your seat while wearing your seat belt. Moving the seat cushion forward may cause strong pressure on your abdomen.
- Do not allow your hands or fingers to get caught in the seat mechanisms while the seat is moving.

## Reclining seatback

Sitting in a reclined position when the vehicle is moving can be dangerous. Even when buckled up, the effectiveness of the restraint system (seat belts and/or airbags) is greatly reduced by reclining your seatback.

Seat belts must be snug against your hips and chest to work properly. When the seatback is reclined, the shoulder belt cannot do its job because it will not be snug against your chest. Instead, it will be in front of you. During a collision, you could be thrown into the seat belt, causing neck or other injuries.

The more the seatback is reclined, the greater chance the passenger's hips will slide under the lap belt or the passenger's neck will strike the shoulder belt.

### Manual Adjustment (Passenger's Seat)

## tif equipped

The front seat can be adjusted by using the levers located underneath the front part of the seat or on the outer side of the seat.

## Forward and rearward adjustment



2C\_AdjustSeatForwardBackwardmanual

Slide the seat while pulling up and holding the seat slide adjustment lever. Release the lever at the position you desire.

## Seatback angle adjustment



2C\_AdjustSeatBackmanual

- 1. Lean forward slightly and lift up the seatback angle adjustment lever.
- 2. Carefully lean back on the seat and adjust the seatback to the desired position.
- 3. Release the lever and make sure the seatback is locked in place (The lever MUST return to its original position for the seatback to lock.).

## Seat cushion height adjustment

## tif equipped



- 2C\_AdjustSeatHeightmanual
- Push down on the lever several times to lower the seat cushion.
- Pull up on the lever several times to raise the seat cushion.

## Lumbar support



For more information, refer to the 'Lumbar support' section in this chapter.

### **Power Adjustment**

## tif equipped

The front seat can be adjusted by using the control switches located on the outside of the seat cushion.



## MARNING

Never allow children to remain in the vehicle unattended. The power seats are operable when the vehicle is turned off.

#### NOTICE

To prevent damage to the seats:

- · Always stop adjusting the seats when the seat has been adjusted as far forward or rearward as possible.
- · Do not adjust the seats longer than necessary when the vehicle is turned off. This may result in unnecessary battery drain.
- Do not operate two or more seats at the same time. This may result in an electrical malfunction.

## Forward and rearward adjustment



2C\_AdjustSeatForwardBackwardAuto

Push the control switch forward or rearward to adjust the seat to the desired position.

## Seatback angle adjustment



Push the control switch forward or rearward to adjust the seatback angle.

## Leg support adjustment

f equipped



2C\_LegSupportCautionAdjust

- Push the control switch forward to raise the leg support.
- Push the control switch rearward to lower the leg support.



## WARNING

- When lowering or raising the Leg support, be careful not to have your hands or legs caught under the front seats or other surrounding parts of the Leg support. Unexpected injuries may occur.
- Do not allow children to adjust the switch. Unexpected injuries may occur.
- Make sure that the leg support do not interfere with each other while adjusting. The body parts or objects may be damaged if it is caught in the interference.



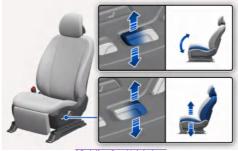
## **CAUTION**

Do not sit or place heavy objects on the Leg support. It may damage the system.

#### INFORMATION

The driver's leg support can be raised only when the gear is in P (Park) or when the vehicle speed is below 3 mph (5 km/h).

## Seat cushion tilt/Seat height adjustment



2C\_AdjustSeatHeightAuto

Push the front or rear portion of the control switch up or down to control the seat cushion angle or height.

## Lumbar support



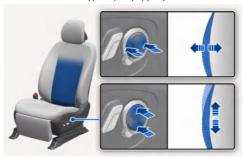




2C\_AdjustSeatBackCushionAuto

Press the front or rear portion of the switch to increase or decrease lumbar support.

Type B (if equipped)



2C\_AdjustSeatBackCushionAuto\_1

Press the front or rear portion of the switch to increase or decrease lumbar support. Press the top or bottom portion of the switch to move the support position up or down.



## **CAUTION**

Do not continue to operate the lumbar support when the lumbar support provides its maximum support. Damage to the lumbar support motor could occur.

#### Seat bolster

## tif equipped



2C\_AdjustSeatBolster

- 1. Push the adjustment lever clockwise, the seatback bolster is adjusted inward. Push the lever counterclockwise, the seatback bolster is adjusted outward.
- 2. Release the lever once the bolster reaches the desired position.

## Seat cushion support





• Push the control switch up to increase cushion support.

- Push the control switch down to decrease cushion support.
- Relaxation comfort seat (Driver's seat)

## tif equipped

Relaxation comfort seats help distribute body pressure and concentrated weight on specific body parts that occur while sitting in the same position for a long period of time. The seat helps relieve fatigue and discomfort by providing the optimal sit position.

Take the following precautions when using the relaxation comfort seat:

- Do not use the relaxation comfort seat while the vehicle is moving. Using the comfort seat could increase the risk of injuries in the event of a collision or sudden stop.
- Do not use the relaxation comfort seat when the luggage or other objects are placed at the rear seat.
- Do not use the relaxation comfort seat while the vehicle is moving. Seat belts may not
  operate normally due to the lack of adherence between the shoulder belts and the
  body.
- Do not use the relaxation comfort seat when the rear seats are not in the rearmost position and upright.

#### INFORMATION

Press the auto return button to return to the original seat position after operating the relaxation comfort seat.

Using the seat adjustment switch other than the auto return button may restrict the downward cushion movement.

## Using the relaxation comfort seat



2C\_RelaxationComfortSeatOperation

- 1. Stop the vehicle and shift to P (Park).
- 2. Press and hold the rear portion of the Relaxation mode switch with the Start/Stop button in the POWER ON or DRIVE REDAY position.
  - The steering wheel height (Driver's seat), seat position, seatback angle, leg support angle and seat cushion height moves to the relaxation position.

#### INFORMATION

- When relaxation comfort seat is activated, the seat cushion, seat cushion extension (if equipped), and seatback angle are adjusted automatically.
- If the relaxation mode is operated unintentionally, use the seat adjustment switches to deactivate or control the seat.

## Returning to the original seat position



2C RelaxationComfortSeatWorkInSwitch

Press and hold the front portion of the Relaxation mode switch to return the seat to the original position.

- The driver seat returns to the original position when the gear was in P (Park). In the following situation, the relaxation comfort seat does not return to the original position.
- When the gear is not in P (Park)
- When the vehicle speed is above 1.8 mph (3 km/h)
- When the driver's seat Integrated Memory System is reset (if equipped)

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Do not use the seat switches simultaneously. It may damage the seat system.

#### INFORMATION

When relaxation comfort seat cannot be operated, reset the Integrated Memory System. If relaxation comfort seat does not operate even after resetting the Integrated Memory System, contact an authorized HYUNDAI dealer.

#### Resetting the Relaxation mode

For more information, refer to the 'Integrated Memory System (IMS)' section in chapter 5.

#### NOTICE

If resetting stops before the process is complete, restart the resetting procedure. The use of Relaxation mode may be limited if resetting has not been completed.

#### INFORMATION

After resetting is completed, adjust the seat to the desired position.

## Ergo-motion seat (Driver's seat)

## tif equipped

Select **Setup** > **Vehicle** > **Seats** > **Ergo-Motion Seat** from the infotainment system's Settings menu to select and set up supplemental functions.



2C\_ErgoMotionSeatAVN



## 👠 WARNING

Before actually using each function, try the functions with the vehicle parked.

#### Comfortable stretch

Comfortable stretch is a function that helps relieve fatigue of the pelvis and lower back due to driving.



Every time you press the button, you may select a mode or turn off the function in the following order.

- Pelvic stretching: The cushion portion moves, helping the left and right movement of the pelvis.
- Lumbar stretching: The seatback portion moves, helping back and forth movement of the lower back.
- Whole Body stretching: The cushion and seatback moves in sequence, helping the whole body reduce fatigue.
- · Off: Turns off Comfortable Stretch.

Also, you can change the operation intensity and operation time from the Settings menu in the infotainment system.

- Intensity: Setup > Vehicle > Seats > Ergo-Motion Seat > Comfortable Stretch > Intensity
   Strong/Normal
- Time: Setup > Vehicle > Seats > Ergo-Motion Seat > Comfortable Stretch > Session Length > Long (20 min)/Medium (15 min)/Short (10 min)

### **Smart posture assist**

After driving for an hour, Smart Posture Assist automatically adjusts the pelvis and back portion of the seat to assist the posture.

You can activate or deactivate Smart Posture Assist function from the Settings menu in the infotainment system. Select:

Setup > Vehicle > Seats > Ergo-Motion Seat > Smart Posture Assist

#### **Smart support**

The seat bolster support increases when SPORT mode is selected for Drive Mode and when driving at high speed.

You can activate or deactivate Smart Support function from the Settings menu in the infotainment system. Select:

• Setup > Vehicle > Seats > Ergo-Motion Seat > Smart Support

#### Walk-in switch





Passengers may use the switches to control the front passenger seat.

· Press the front or rear portion of the switch to move the seat forward, rearward or adjust the seatback angle.



#### CAUTION

Do not adjust the front seat when a passenger is getting on or off the vehicle.

# Seatback pocket



The seatback pocket is provided on the back of the front seatbacks.



# **MARNING**

Do not put heavy or sharp objects in the seatback pockets. In an accident they could come loose from the pocket and injure occupants.

# **Adjusting Rear Seats**

Before driving, adjust the seat to the proper position for passengers or cargo.



#### MARNING.

- When returning the rear seatback from a folded to an upright position, hold the seatback and return it slowly. Ensure that the seatback is completely locked into its upright position by pushing on the top of the seatback. In a collision or sudden stop, the unlocked seatback could allow cargo to move forward with great force and enter the passenger compartment, which could result in serious injury or death.
- Do not place objects in the rear seats, since they cannot be properly secured and may hit vehicle occupants in a collision causing serious injury or death.
- Make sure the vehicle is off, the shift lever is in P (Park), and the parking brake is securely applied whenever loading or unloading cargo. Failure to take these steps may allow the vehicle to move if the shift lever is inadvertently shifted to another position.

# 2nd Row Seat Adjustment (Manual Adjustment)



### Forward and rearward adjustment



2C 2ndSeatAdjust3seats

Slide the seat while pulling up and holding the seat slide adjustment lever. Release the lever at the position you desire.

Adjust the seat before driving, and make sure the seat is locked securely by trying to move forward and backward without using the lever. If the seat moves, it is not locked properly.

## Seatback angle adjustment



2C\_Adjust2ndSeat3seatsTypeBack

- 1. Pull up the seatback recline lever.
- 2. Hold the lever and adjust the seatback of the seat to the position you desire.
- 3. Release the lever and make sure the seatback is locked in place. The lever MUST return to its original position for the seatback to lock.

### 2nd Row Seat Adjustment (Power Adjustment, 6-Seater)

## tif equipped



## WARNING

- When lowering or raising the Leg support, be careful not to have your hands or legs caught under the front seats or other surrounding parts of the Leg support. Unexpected injuries may occur.
- Do not allow children to adjust the switch. Unexpected injuries may occur.
- · Make sure that the leg support do not interfere with each other while adjusting. The body parts or objects may be damaged if it is caught in the interference.



# **CAUTION**

Do not sit or place heavy objects on the Leg support. It may damage the system.



2C Adjust2ndSeat3seatsTypeForwardBackwardAuto

No.	Description
1	<ul> <li>Leg support adjustment</li> <li>Push the control switch forward to raise the leg support.</li> <li>Push the control switch rearward to lower the leg support.</li> </ul>
2	Seat cushion angle adjustment Push the front portion of the control switch up or down to control the seat cushion angle.
3	Adjusting the seatback angle Push the control switch forward or rearward to adjust the seat to the desired position
4	Forward and rearward adjustment Push the control switch forward or rearward to adjust the seat to the desired position.

#### Walk-in switch





## MARNING

When folding and sliding the 2nd row seat to access the 3rd row, ensure the vehicle is completely stopped. Only operate the switch after any occupants or passenger of the 2nd row seat have disembarked. Do not press the button to fold the seat if someone is seated or disembarking from the 2nd row seat, as sudden seat movement may result in injury.

Manual adjustment (7-Seater driver's side 2nd row seat)

- 1. Store the 2nd row seat belt in the storage holder.
- 2. Press either the 3rd row seat walk-in switch located at the top of the 2nd row seatback or the 3rd row seat walk-in switch on the outer side of the 2nd row seat. Then the seatback will fold and the seat will move forward slightly.

If necessary, push the 2nd row seat forward.



2C\_2ndSeatworkinSwitchBack

3. Hold the seat to safely get in or out of the 3rd row seat.

#### INFORMATION

If a seat is located in the center of 7-seater, it moves together when using the seat adjustment of the 2nd row seat behind the driver seat.

Walk-in switch may not operate properly when:

- · When the 2nd row seat belt is fastened
- When the vehicle is moving more than 3 mph (5 km/h)
- When the gear is not in P (Park)

#### Power adjustment (6-Seater)

- 1. Store the 2nd row seat belt in the storage holder.
- 2. Press either the 3rd row seat access switch located at the top of the 2nd row seatback or the 3rd row seat access switch on the outer side of the 2nd row seat. Then the seatback will fold and the seat will move forward slightly.

If necessary, push the 2nd row seat forward.



2C\_2ndSeatworkinSwitchBack 2

- 3. Hold the seat to safely get in or out of the 3rd row seat.
- **4.** After accessing or exiting the 3rd row, adjust the position of the 2nd row seat, and have the seatback to the upright position.

# Tilting walk-in seat (7-Seater right side seat)

This function allows you to get in or out of the 3rd row seats without removing the child safety seat.



#### CAUTION

For 7 seats, if a child seat is installed, operate after checking that the child seat is well fixed to the seat.

Store the 2nd row seat belts in the storage holder.

1. When the walk-in switch is pressed, both the seat cushion and seatback tilt forward.



2. Hold your seat and safely get into or out of the 3rd row seat.

After getting on or off, push the seat backward and raise the seatback to its original position.

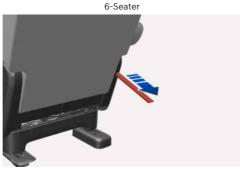
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Do not operate the walk-in function when the seatback of the 2nd row seats are folded.

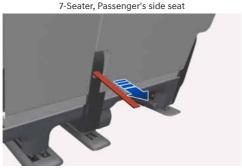
# Emergency seat folding strap

## tif equipped

If the walk-in switch does not work, get out of the vehicle by pulling the seat folding strap in case of an emergency.



2C\_2ndSeatWorkinStrapRearView



2C\_2ndSeatWorkinStrapRearView\_1

- 6-Seater (manual adjustment): Pull the seat folding strap to move forward the 2nd row seats.
- 6-Seater (automatic adjustment), 7-Seater (manual adjustment): Pull the seat folding strap to fold 2nd row seats. Hold the seat and lower it safely.



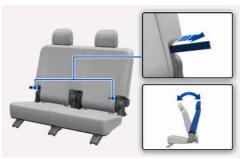
## MARNING.

Never attempt to pull the strap while the 2nd row seat is occupied as the seat may suddenly move and cause the passenger on the seat to be injured. Use only the strap when the walk-in switch does not work.

## **3rd Row Seat Adjustment**

## Seatback angle adjustment

### Manual adjustment



2C Adjust3ndSeatBack

- 1. Pull up the seatback recline strap.
- 2. Hold the strap and adjust the seatback of the seat to the position you desire.
- 3. Release the strap and make sure the seatback is locked in place. The strap MUST return to its original position for the seatback to lock.

## Power adjustment



2C\_3rdRowBackrestElectricAdjust

- Press the 3rd row seat back angle adjustment switch located on the left and right of the 3rd row side trim.
- 2. Carefully lean back on the seat and adjust it to the desired position.
- 3. When the adjustment is complete, release the switch.

## **Folding the Rear Seats**

The rear seatbacks can be folded to facilitate carrying long items or to increase the luggage capacity of the vehicle.

- 1. Locate the seat belt toward the outboard position before folding down the seatback to avoid the seat belt system interfering with the seatback.
- 2. Lower the rear head restraints to the lowest position.
- 3. Route the seat belt webbing through the rear seat belt guides to prevent the belts from being trapped behind or under the seats.

# Manual adjustment

2nd row seat

 Pull the seatback folding lever (2nd row seat) to completely fold the seat toward the front of the vehicle. Make sure the seatback is locked in place.



2C\_RearSeatFoldingStep\_1

· When using it as a seat, pull the seatback folding lever (2nd row seat) to fully raise the seatback. Adjust the seatback to the desired angle and release the lever to lock in place.



2C\_RearSeatFoldingStep\_2

#### 3rd row seat

· Pull the seatback angle adjustment strap to completely fold the seatback forward. Make sure the seatback is securely locked in place.



· When using it as a seat, pull the seatback angle adjustment strap to fully raise the seatback. Adjust the seatback to the desired angle, and release the upper angle adjustment strap to lock in place. Make sure the seatback is locked in place.



Seats & Safety System 39



- Be careful when loading cargo through the rear passenger seats to prevent damage to the vehicle interior.
- When cargo is loaded through the rear passenger seats, ensure the cargo is properly secured to prevent it from moving while driving.
- Unsecured cargo in the passenger compartment can cause damage to the vehicle or injury to it's occupants.

## Power adjustment



2C 2ndSeatBeltHolder



2C\_Adjust2ndSeatForwardBackwardAuto

- With the door open, the seatback will recline when you pull the upper portion of seatback switch for more than a second while the seatback is folded down toward the front and the plate is not locked in the seat belt buckle of the 2nd row seat. Make sure the seatback is locked in place.
- When using it as a seat, push the upper portion of the seatback angle adjustment switch rearward for more than a second to have an upright position.
- Once the seatback is raised, lightly shake it back and forth to ensure it is securely locked before driving.

# Seatback remote folding (Cargo area)

## tif equipped



2C\_2ndSeatBackFoldingSwitch

This feature can make it easier for you to fold or unfold the 2nd row, 3rd row seatback when the liftgate is open.

- 1. Press the folding/unfolding switch located on the cargo area.
  - If the switch is operated while folding or unfolding the seatback, the operation will stop. Operating the switch again will resume the process.
  - If the vehicle is ON while folding or unfolding the backrest, the operation will temporarily stop. Once the vehicle is running, the operation will resume.
- 2. Once the seatback is folded forward, the space can be used for cargo.
- 3. If the seatback does not fold down completely, push it to make sure it's fully folded.

	Туре	Operation				
Α	A A	When you press the switch, the left (L) or right (R) seatback of the 2nd row seat folds.				
В	THE STATE OF THE S	When the switch is pressed, the left (L) or right (R) seatback of the 2nd row seats is folded, and when pressed again, it is unfolded.				
С	THE THE	When the switch is pressed, the left (2nd L) or right (2nd R) seatback of the 2nd row seat folds.  When the switch is pressed, the left (3rd L) or right (3rd R) seatback of the 3rd row seats is folded, and when pressed again, it is unfolded.				

	Туре	Operation			
D	10 10 10 10 10 10 10 10 10 10 10 10 10 1	When the switch is pressed, the left (2nd L) or right (2nd R) seatback of the 2nd row seat is folded. and when pressed again, it is unfolded.  When the switch is pressed, the left (3rd L) or right (3rd R) seatback of the 3rd row seats is folded, and when pressed again, it is unfolded.			



### WARNING

Always check for any occupants or passengers in the 2nd row seats before folding. Do not fold the seat if there are pets, luggage, passengers sitting in the 2nd row seats, or when passengers are getting off the vehicle. A sudden movement of the seat may cause injury.

## Armrest (2nd row seat)



### CAUTION

- · When using the 2nd row seat folding function, use it after raising the armrest to the highest position.
- The armrest may be damaged if you sit on it or apply excessive load.



6-Seater

When the armrest is within Range 2, lower the armrest to the lowest position, then lift the armrest within Range 1 of the armrest adjustment angle, and then use it at the angle you desire.

- · When the armrest is within Range 1 of the adjustment angle, lift the armrest to the highest position (within Range 2), then lower it to the lowest position until it makes a "click" sound, and use it while lifting the armrest again within Range 1 of the armrest adjustment angle.
- After fixing, the lower adjustment is not possible.



You can open or close the armrest by pulling the top of the armrest forward or pushing it toward the seatback.

## **Head Restraints**

The vehicle's front and rear seats have adjustable head restraints. The head restraints are designed to help protect passengers from whiplash and other neck and spinal injuries during a collision, especially a rear impact collision.



# WARNING

To help reduce, the risk of serious injury or death in a crash, take the following precautions when adjusting your head restraints:

- · Always adjust the head restraints properly for all passengers BEFORE starting the vehicle.
- Never let anyone ride in a seat with the head restraints removed or reversed.
- Adjust the head restraints so that the middle of the head restraint is at the same height as the top of the eyes.



2C HeadrestRightPosition

- Never adjust the driver's head restraint when the vehicle is moving.
- Make sure the head restraint is locked in place after adjustment.



# **CAUTION**

- · When there are no occupants in the rear seats, adjust the rear head restraints to the lowest height to improve the driver's visibility.
- · If you recline the seatback towards the front with the head restraint and seat cushion raised, the head restraint may come in contact with the sunvisor or other parts of the vehicle.



2C AdjustHeadrestCaution

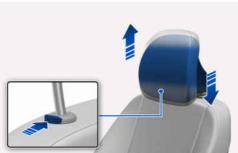
### **Front Seat Head Restraints**



2C\_HeadrestOverview

The driver's and front passenger's seats are equipped with adjustable head restraint for the passenger's safety and comfort.

# Adjusting the height up and down



2C\_AdjustHeadrestUpDown

Press and hold the release button on the head restraint support to adjust the height.

# Removing the head restraint



2C\_RemoveHeadrestManual



2C\_RemoveHeadrestAuto

- 1. Recline the seatback with the seatback angle lever or switch.
- 2. Raise the head restraint as far as it can go.
- 3. Press the head restraint release button while pulling the head restraint up.

# Reinstalling the head restraint



2C\_InstallHeadrestManual



2C\_InstallHeadrestAuto

- 1. Recline the seatback.
- 2. Put the head restraint poles into the holes while pressing the release button.

- 3. Adjust the head restraint to the appropriate height.
- 4. Return the seatback with the seatback angle lever or switch.

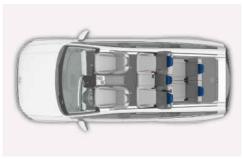
## **Rear Seat Head Restraints**





2C\_RearHeadrestPosition

7-seater

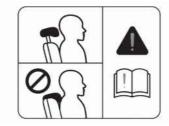


2C\_RearHeadrestPosition\_1

The rear seats are equipped with head restraints in all the seating positions for the passenger's safety and comfort.



# MARNING

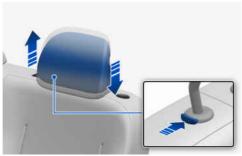


2C\_RearHeadrestCaution

When a passenger is sitting on the 2nd row center seat, always raise the head restraint above the lowest stored position.

### 2nd Row Head restraint

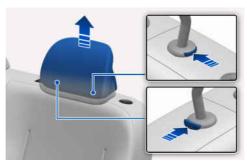
# Adjusting the height up and down



2C\_AdjustRearHeadrestUpDown

Press and hold the release button on the head restraint support to adjust the height.

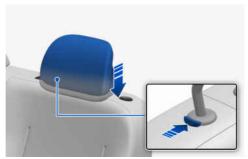
# Removing the head restraint



2C\_AdjustRearHeadrestUpDown\_3

- 1. Raise the head restraint as far as it can go.
- 2. Press the head restraint release button while pulling up the head restraint.

# Reinstalling the head restraint



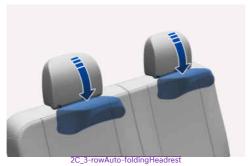
2C\_AdjustRearHeadrestUpDown\_2

1. Put the head restraint poles into the holes while pressing the release button.

2. Adjust the head restraint to the appropriate height.

# 3rd row automatic head restraint folding

The head restraints in the 3rd row seats automatically fold together when the seatback is folded.



- The seatbacks and head restraints will automatically fold by pulling the 3rd row seat folding straps or pressing the button (if equipped) located on the seatback.
- Manually return the head restraint after raising the seatback. Always make sure the head restraint is locked in place.

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The height of the 3rd row automatic folding head restraints cannot be adjusted.

# **Seat Warmers And Air Ventilation Seats**

### f Equipped



# MARNING .

The seat warmers can cause serious burns, even at low temperatures and especially if used for long periods of time.

Passengers must be able to feel if the seat is becoming too warm so they can turn it off, if needed.

Seat warmers consumes huge amount of electricity. Please avoid using seat warmers while the vehicle is off in order to prevent the battery discharge.

People who cannot detect temperature change or pain to the skin should use extreme caution, especially the following types of passengers:

- Infants, children, elderly or disabled persons, or people with medical condition causing insensitivity to hot objects or heat intolerance and heat and temperature sensitivity.
- · People with sensitive skin or who burn easily.
- · Fatigued individuals.
- · Intoxicated individuals.
- People taking medication that may cause drowsiness or sleepiness.

Never place anything on the seat that insulates against heat when the seat warmer is operating, such as a blanket or seat cushion.

#### NOTICE

To prevent damage to the seat warmers, air ventilation seats, and seats:

- Never use a solvent such as paint thinner, benzene, alcohol or gasoline to clean the seats.
- Do not place heavy or sharp objects on seats equipped with seat warmers.
- Do not change the seat cover. It may damage the seat warmer.
- Do not change the seat covers. It may damage the air ventilation seat.
- Do not place materials such as plastic bags or newspapers under the seats. They may block the air intake causing the air vents not to work properly.
- Avoid spilling liquids on the surface of the front seats and seatbacks. This may cause the air vent holes to become blocked and not to work properly.
- If the air vents do not operate, restart the vehicle. If there is no change, have your vehicle be inspected by an authorized HYUNDAI dealer.

#### **Seats Warmers**

Seat warmers are provided to warm the seats during cold weather. During mild weather or under conditions where the operation of the seat warmer is not needed, keep the seat warmers off.

#### Front seat warmers



While the vehicle is running, touch the icon to warm the driver's seat or front passenger's seat.

Touch the icon repeatedly to cycle through the seat warmer temperature from high, medium, low, and off.

#### Rear seat warmers



While the vehicle is running, press the seat warmer button to warm the rear seat.

Press the button repeatedly to cycle through the seat warmer temperature from high, medium, low, and off.

Operating the rear seat warmer from the front seat

### tif equipped

Select **Seats** > **2nd Row Seat Warmer** from the Settings menu in the infotainment system. Select the seat warmer icon of the desired seat to warm the rear seat.

 Touch the icon repeatedly to cycle through the seat warmer temperature from high, medium, low, and off.

### **INFORMATION**

- The seat warmer temperature is lowered automatically and then goes off after a certain time to prevent low temperature burns. If high temperature is selected again after the seat warmer turns off, the temperature is controlled automatically again.
- The seat warmer defaults to the OFF position whenever the Start/Stop button is pressed to the POWER ON or DRIVE READY position.

## **Air Ventilation Seats**

## tif equipped

The air ventilation seats cool the front seats by blowing air through small vent holes on the surface of the seat cushions and seatbacks.

#### Front air ventilation seats





2C\_FrontSeatVentilationSwitch

While the vehicle is running, touch the icon to cool the driver's seat or front passenger's seat.

Touch the icon to repeatedly to cycle through the airflow speed from high, medium, low, and off.

## Rear seat air ventilation seats

# f equipped



2C\_RearSeatVentilationSwitch

While the vehicle is running, press the button to cool the seat.

Press the button repeatedly to cycle through the air ventilation seat from high, medium, low, and off.

# Operating the rear ventilation seat from the front seat

## if equipped

Select **Seats > 2nd Row Seat air ventilation** from the Settings menu in the infotainment system.

Select the seat air ventilation icon of the desired seat to cool the rear seat.

 Touch the icon repeatedly to cycle through the seat air ventilation from high, medium, low, and off.

## INFORMATION

- It may take 3 to 5 minutes after switch operation to feel the temperature change.
- Use the air ventilation seat with the air conditioning on for more effective ventilation.
- The air ventilation seat defaults to the OFF position whenever the Start/Stop button is pressed to the POWER ON or DRIVE READY position.

## **Seat Belts**

This section describes how to use the seat belts properly. It also describes some of the things not to do when using seat belts.

# **Seat Belt Safety Precautions**

Always fasten your seat belt and make sure all passengers have fastened their seat belts before starting any trip. Airbags are designed to supplement the seat belt as an additional safety device, not a replacement. Most states require all vehicle occupants wear seat belts.



### WARNING

Seat belts must be used by ALL passengers whenever the vehicle is moving. To prevent serious injury or death:

- Children under the age of 13 should be properly restrained in the rear seats.
- Never allow children to ride in the front passenger seat, unless the airbag is deactivated. If a child is seated in the front passenger seat, move the seat as far back as possible. And the child must always be restrained in the seat properly.
- NEVER allow an infant or child to be carried on an occupant's lap.
- NEVER ride with the seatback reclined when the vehicle is moving.
- · Do not allow children to share a seat or seat belt.
- Do not wear the shoulder belt under your arm or behind your back.
- NEVER wear a seat belt over fragile objects. If there is a sudden stop or impact, the seat belt can damage it.
- Do not use the seat belt if it is twisted. A twisted seat belt will not protect you properly
  in a collision.
- Do not latch the seat belt into the buckles intended for other seating positions.
- Never unfasten the seat belt while driving. This may cause loss of vehicle control resulting in a collision.
- Make sure there is nothing in the buckle that could interfere with the seat belt latch mechanism from fastening securely.
- Never modify seat belt or install devices that may prevent seat belt assembly from removing slack.
- Do not use a seat belt if the webbing or hardware is damaged. Have the seat belt replaced by an authorized HYUNDAI dealer.

Damaged seat belts and seat belt assemblies do not operate properly. Always replace:

- Frayed, contaminated, or damaged webbing.
- · Damaged hardware.
- The entire seat belt assembly after it has been worn in a crash, even if damage to webbing or assembly is not apparent.

# Seat belt use during pregnancy

The seat belt should always be used during pregnancy. The best way to protect your unborn child is to protect yourself by always wearing the seat belt.

Pregnant women should always wear a lap-shoulder seat belt. Place the shoulder belt across your chest, routed between your breasts and away from your neck. Place the lap belt below your belly and pull the shoulder portion so it fits SNUGLY across your hips and pelvic bone, under the rounded part of your belly.



### MARNING

- A pregnant woman is more vulnerable to any impacts on the abdomen during an abrupt stop or collision. If you are in a crash while pregnant, consult your doctor.
- To reduce the risk of serious injury or death to an unborn child during a crash, do not let pregnant women place the lap portion of the seat belt above or over the area of the abdomen where the unborn child is located.

#### Seat belt use and children

#### Infant and small children

All 50 states have Child Restraint System laws that require children to travel in approved Child Restraint System devices, including booster seats. The age at which seat belts can be used instead of Child Restraint System may be different, so you should be aware of the specific requirements in your state where you are traveling. Infant and Child Restraint System must be properly placed and installed in a rear seat.

For more information, refer to the 'Child Restraint System' section in this chapter.

Small children are best protected from injury in a crash when properly restrained in the rear seat by a Child Restraint System that meets the requirements of the Federal Motor Vehicle Safety Standards. Before buying any Child Restraint System, make sure that it has a label certifying that it meets the Federal Motor Vehicle Safety Standards FMVSS 213. The Child Restraint System must be appropriate for your child's height and weight. Check the label on the Child Restraint System for this information.

For more information, refer to the 'Child Restraint System' section in this chapter.



#### WARNING

- Always properly restrain infants and small children in a Child Restraint System appropriate for the child's height and weight.
- To reduce the risk of serious injury or death to a child and other passengers, never hold a child in your lap or arms when the vehicle is moving. Violent forces during a collision will tear the child from your arms and throw the child against the interior or to be ejected from the vehicle.

#### Larger children

Children under age 13 and who are too large for a booster seat should always occupy the rear seat and use the available lap/shoulder belts. A seat belt should be snug against the hips and be snug across the shoulder and chest to restrain the child safely. A child's squirming could move the belt out of position. Adults should frequently check belt fit. In a collision, the safest place for children is in the rear seats, using a Child Restraint System appropriate for the child.

If a larger child over age 13 must be seated in the front seat, the child must be securely restrained by the available seat belt and the seat should be placed in the rearmost position.

If the shoulder belt portion slightly touches the child's neck or face, try placing the child closer to the center of the vehicle. If the shoulder belt still touches their face or neck, the child needs to return to an appropriate booster seat in the rear seat.



## WARNING

- Always make sure children's seat belts are buckled and properly adjusted.
- · Never allow the shoulder belt to contact the child's neck or face.
- Do not allow more than one child to use a single seat belt.

## Seat belt use and injured people

A seat belt should still be used when an injured person is being transported. Consult a physician for specific recommendations.

## One person per belt

When two people (children or adults) are sitting together, never attempt to use a single seat belt. This could increase the severity of injuries in a collision.

#### Do not lie down

Sitting in a reclined position when the vehicle is moving, can be dangerous. Even when buckled up, the protections of your restraint system (seat belts and/or airbags) are greatly reduced by reclining your seatback.

Seat belts must be snug against your hips and chest to work properly.

During a collision, you could be thrown into the seat belt, causing neck or other injuries.

The more the seat back is reclined, the greater the chance for the passenger's hips to slide under the lap belt or the passenger's neck to strike the shoulder belt.



### MARNING

- Never ride with a reclined seatback when the vehicle is moving.
- Do not ride with a reclined seatback. It may increase your chance of serious or fatal injuries in the event of a collision or sudden stop.
- Have the driver and all passengers always sit well back in their seats, properly belted, and with the seatbacks upright.

#### **Care of Seat Belts**

Seat belt systems should never be disassembled or modified.

# Periodic inspection

All seat belts should be inspected periodically for wear or damage of any kind. Any damaged parts should be replaced as soon as possible.

# Keep belts clean and dry

Seat belts should be kept clean and dry. If belts become dirty, they can be cleaned by using a mild soap solution and warm water. Bleach, dye, strong detergents, or abrasives should not be used because they may damage and weaken the fabric.

### When to replace seat belts

The entire seat belt assembly or assemblies should be replaced if the vehicle has been involved in a crash. This should be done even if no damage is visible. Consult an authorized HYUNDAI dealer for assistance.

#### **Seat Belt Features**

## Retractor pretensioner seat belt (front seat and second row outboard seat)



2C RetractPretensioner

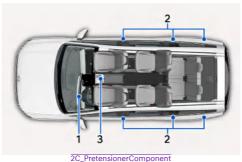
Your vehicle is equipped with driver's, front passenger's and rear passenger's (if equipped) pretensioner seat belts (retractor pretensioner). The pretensioner makes sure the seat belts fit tightly against your body in certain frontal or side collision(s). The pretensioner seat belts may be activated in some crashes where the frontal or side collision(s) is severe enough, together with the airbags.

When the vehicle stops suddenly, or if you try to lean forward too quickly, the seat belt retractor locks in place.

In some frontal collisions, the pretensioner activates and pulls the seat belt against your body.

If the system senses excessive tension on the driver or passenger's seat belt when the pretensioner system activates, the load limiter inside the retractor pretensioner will release some of the pressure on the affected seat belt (if equipped with load limiter).

## Pretensioner seat belt system components



- SRS airbag warning light
- 2. Retractor pretensioner

#### 3. SRS control module



## MARNING .

To prevent serious injury or death:

- Always wear your seat belt and sit properly in your seat.
- · Do not use the seat belt if it is loose or twisted.
- · Do not place anything near the buckle.
- Always replace your pretensioners after activation or a crash.
- Never inspect, service, repair or replace the pretensioners by yourself. Have the pretensioners inspected, serviced, repaired, or replaced by only an authorized HYUNDAI dealer.
- Do not hit seat helt assemblies
- Do not touch the pretensioner seat belt assemblies for several minutes after they have been activated. When the pretensioner seat belt mechanism deploys during a collision, the pretensioner can become hot and can burn you.
- Have the system serviced by an authorized HYUNDAI dealer. Body work on the front of the vehicle may damage the pretensioner seat belt system.



# CAUTION

- Body work on the front area of the vehicle may damage the pretensioner seat belt system. Therefore, have the system to be serviced by an authorized HYUNDAI dealer.
- Pretensioner seat belts may be activated in certain frontal or side collisions or rollover situations (if equipped with rollover sensor).
- When the pretensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous.
- · Although it is non-toxic, the fine dust may cause skin irritation and must not be inhaled for prolonged periods. Wash all exposed skin areas thoroughly after an accident in which the pretensioner seat belts were activated.

#### NOTICE

- The sensor that activates the Supplemental Restraint System (SRS) control module is connected with the pretensioner seat belt. The SRS airbag warning light on the instrument cluster illuminates for about 3-6 seconds after the Start/Stop button is in the POWER ON position, and then it turns off.
- · If the pretensioner is not working properly, the warning light illuminates even if the SRS airbag is not malfunctioning. If the warning light does not illuminate when starting the vehicle or stays illuminated or illuminates while driving, have the pretensioner seat belts and/or SRS control module inspected by an authorized HYUNDAI dealer as soon as possible.

## **Seat Belt Restraint System**



## MARNING .

Improperly positioned seat belts may increase the risk of serious injury in a crash. Take the following precautions when adjusting the seat belt:

- Position the lap portion of the seat belt as low as possible across your hips, not on your waist, so that it fits snugly. This allows your strong pelvic bones to absorb the force of a collision, reducing the chance of internal injuries.
- Position one arm under the shoulder belt and the other over the belt, as shown in the illustration.
- Always position the shoulder belt anchor into the locked position at an appropriate height.
- Never position the shoulder belt across your neck or face.

#### NOTICE

If you cannot smoothly pull the seat belt out from the retractor, firmly pull the seat belt out and release it. After release, the belt may be pulled out smoothly.

## Driver's seat belt - 3-point system with emergency locking retractor

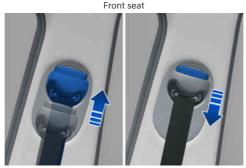
Fastening your seat belt



- 1. Height adjuster button
- 1. Pull the seat belt out of the retractor and insert the metal tab buckle. An audible "click" sounds when the tab locks into the buckle. Make sure the seat belt is not twisted.
- 2. Place the lap belt portion across your hips and the shoulder belt portion across your chest.
  - The seat belt automatically adjusts to the proper length after the lap belt portion is adjusted manually so that it fits snugly around your hips. If you lean forward in a slow, easy motion, the belt extends and moves with you.
  - If there is a sudden stop or impact, the belt will lock into position. It will also lock if you try to lean forward too quickly.
- 3. Adjust the height of the shoulder belt so that it lies across your chest and midway over your shoulder nearest the door, not over your neck.

• To raise the height, pull it up. To lower it, push it down while pressing the height adjuster button. Release the button to lock the anchor in place. Try pushing the height adjuster down to make sure that it is locked in place.

### Height adjustment



2C\_AdjustSeatBeltHeight

Adjust the height of the shoulder belt so that it lies across your chest and midway over your shoulder nearest the door, not over your neck.

Pull it up to raise the height. To lower it, push it down while pressing the height adjuster button.

Release the button to lock the anchor in place. Try pushing the height adjuster down to make sure that it is locked in place.

## Releasing your seat belt



2C\_SeatBeltRelease

Press the release button in the locking buckle.

The belt should automatically draw back into the retractor. If this does not happen, check the belt is not twisted, then try again.

### Rear center seat belt





Insert the tongue plate into the buckle until an audible "click" is heard, indicating the latch is locked. Pull the shoulder portion of the belt to snug the belt across your hips and remove slack. Make sure the seat belt is not twisted.

When using the rear center seat belt, use the buckle with the **CENTER** mark.



### WARNING

Make sure the seatback is locked in place when using the rear center seat belt. If not secure, the seatback may move if there is a sudden stop or crash and result in serious injury or death.

## Passenger and rear seat belts - 3-point system with convertible locking retractor

This type of seat belt combines both an emergency locking retractor and an automatic locking retractor. Convertible retractor type seat belts are installed in the rear seat positions to help accommodate the installation of Child Restraint Systems.

A convertible retractor is also installed in the front passenger seat position, children should always be seated in the rear and never place any infant/child restraint system in the front seat.

#### Fastening your seat belt

Pull the seat belt out of the retractor and insert the metal tab into the buckle. An audible "click" sounds when the tab locks into the buckle. Pull the shoulder portion of the belt to snug the belt across your hips and remove slack. Make sure the seat belt is not twisted.

When not securing a child restraint, the seat belt automatically adjusts to the proper length only after the lap belt portion of the seat belt is adjusted manually so that it fits snugly across your hips.

When the seat belt has been fully extended from the retractor to allow for the installation of a child restraint system, the seat belt operation changes to allow the belt to retract, but not to extend (Automatic Locking Retractor Type). For more information, refer to the 'Child Restraint System' section in this chapter.

### Releasing your seat belt



Press the release button in the locking buckle.

The belt should automatically draw back into the retractor. If this does not happen, check the belt is not twisted, then try again.

#### INFORMATION

- The emergency locking mode allows seated passengers to move freely in their seats while keeping some tension on the belt. During a collision or sudden stop, the retractor automatically locks the belt to help restrain the passengers.
- To deactivate the automatic locking mode, unbuckle the seat belt and allow the belt to fully retract.

# **Seat Belt Warning Light**

# Driver's and front passenger's seat belt warning



2C SeatBeltWarningLampOverview

- · As a reminder, the driver's and front passenger's seat belt warning lights illuminate for about 6 seconds each time the Start/Stop button is in the POWER ON position regardless of seat belt fastening.
- The seat belt warning light illuminates until the seat belt is fastened.
- If the seat belt is unfastened while driving:
  - Below 12 mph (20 km/h): the seat belt warning light illuminates
  - Above 12 mph (20 km/h): the seat belt warning chime sounds for a certain period of time and the warning light blinks



Riding in an improper position may adversely affect the front passenger's seat belt warning system. Instruct the passenger to properly be seated when the vehicle is moving.

#### NOTICE

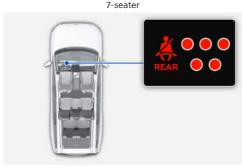
- · If the front passenger seat is not occupied, the seat belt warning light blinks or illuminates for 6 seconds.
- The front passenger's seat belt warning may operate when luggage is placed on the front passenger seat.

## Rear passenger's seat belt warning





2C\_RearSeatBeltWarningLamp



2C RearSeatBeltWarningLamp 1

### For rear seat

- · As a reminder to the rear passenger, the rear passenger's seat belt warning lights will illuminate for about 6 seconds each time the Start/Stop button is in the POWER ON position regardless of belt fastening.
- If the seat belt is not fastened when the Start/Stop button is in the POWER ON position, the seat belt warning light will illuminate for about 70 seconds.

- After wearing the seat belt, if you unfasten it when you drive under 12 mph (20 km/h), the corresponding warning light will continue to illuminate for about 70 seconds.
- After wearing the seat belt, if you unfasten it when you drive over 12 mph (20 km/h), the seat belt warning chime will sound for about 35 seconds and the corresponding warning light will blink.
- If the rear door is opened or closed under 6 mph (10 km/h), the warning light and warning sound do not work even if driving over 12 mph (20 km/h).

# **Child Restraint System**

### **Children Always in the Rear**



### MARNING

- Always properly restrain children in the rear seats of the vehicle. Children of all ages are safer when restrained in the rear seat. A child riding in the front passenger seat can be forcefully struck by an inflating airbag resulting in serious injury or death.
- · Never install a child or infant restraint in the front passenger's seat. Placing a rearwardfacing child restraint in the front seat may result in serious injury or death, if the child restraint is struck by an inflating airbag.

Children under age 13 should always ride in the rear seats and must always be properly restrained to minimize the risk of injury in a collision, sudden stop, or sudden maneuver.

According to crash statistics, children are safer when properly restrained in the rear seat than in the front seat. Even with airbags, children can be seriously injured or killed. Children too large for a Child Restraint System must use the seat belts provided.

All 50 states have child restraint laws that require children to travel in approved Child Restraint Systems.

The laws governing the age or height/ weight restrictions at which seat belts can be used instead of Child Restraint System differs among states, so you should be aware of the specific requirements where you are travelling.

Child Restraint Systems must be properly placed and installed in the rear seat. Use a commercially available Child Restraint System that meets the requirements of the Federal Motor Vehicle Safety Standards (FMVSS 213).

Child Restraint Systems are generally designed to be secured in a vehicle seat by a lap/ shoulder seat belt, or by a LATCH system in the rear seats of the vehicle.

# Child Restraint System

Infants and younger children must be restrained in an appropriate rearward-facing or forward-facing Child Restraint System that has first been properly secured to the rear seats of the vehicle. Read and comply with the instructions for installation and use provided by the manufacturer of the Child Restraint System.



Do not use an improperly secured child restraint. It may increase the risk of serious injury or death in a collision.

When using a Child Restraint System:

- Never install a child or infant restraint in the front passenger's seat.
- Always properly secure the Child Restraint System in the rear seat of the vehicle.
- Always follow the Child Restraint System manufacturer's instructions for installation and use.
- Always properly restrain your child in the Child Restraint System.
- If the head restraint prevents proper installation of a child seat (as described in the Child Restraint System manual), readjust or remove the head restraint for that seating position.
- Do not use an infant carrier or a child safety seat that 'hooks' over a seatback. It may
  not provide adequate protection in a crash.
- After a crash, have an authorized HYUNDAI dealer check the Child Restraint System, seat belts, tether anchors, and lower anchors.

## **Selecting a Child Restraint System**

When selecting a Child Restraint System for your child, always:

- Make sure the Child Restraint System has a label certifying that it meets applicable Federal Motor Vehicle Safety Standards (FMVSS 213).
- Select a Child Restraint System based on your child's height and weight. The required label or the instructions for use typically provide this information.
- Select a Child Restraint System that fits the vehicle seating position where it is to be used
- Read and comply with the warnings and instructions for installation and use provided with the Child Restraint System.

# Child Restraint System types



There are three main types of Child Restraint Systems: rearward-facing, forward-facing, and booster seat Child Restraint Systems.

They are classified according to the child's age, height, and weight.

NEVER install a child or infant restraint in the front passenger's seat.

Placing a rearward-facing child restraint in the front seat can result in SERIOUS INJURY or DEATH if the child restraint is struck by an inflating air bag.

### Rearward-facing Child Restraint System

A rearward-facing Child Restraint System provides restraint with the seating surface against the back of the child. The harness system holds the child in place, and in an accident, acts to keep the child positioned in the Child Restraint Systems and reduce the stress to the fragile neck and spinal cord.

All children under the age of one year must always ride in a rearward-facing Child Restraint System. Convertible and 3-in-1 Child Restraint Systems typically have higher height and weight limits for the rearward-facing position, allowing you to keep your child rearward-facing for a longer period of time.

Keep using Child Restraint Systems in the rearward-facing position as long as children fit within the height and weight limits allowed by the Child Restraint System's manufacturer. It's the best way to keep them safe.

Once your child has outgrown the rearward-facing Child Restraint System, your child is ready for a forward-facing Child Restraint System with a harness.

### Forward-facing Child Restraint System

A forward-facing Child Restraint System provides restraint for the child's body with a harness. Keep children in a forward-facing Child Restraint System with a harness until they reach the top height or weight limit allowed by your Child Restraint System's manufacturer.

Once your child outgrows the forward-facing Child Restraint System, your child is ready for a booster seat.

#### **Booster seats**

A booster seat is a Child Restraint System designed to improve the fit of the vehicle's seat belt system. A booster seat positions the seat belt so that it fits properly over the lap of your child. Keep your children in booster seats until they are big enough to fit in a seat belt properly.

For a seat belt to fit properly, the lap belt must lie snugly across the upper thighs, not the stomach. The shoulder belt should lie snug across the shoulder and chest and not across the neck or face. Children under age 13 must always be properly restrained to minimize the risk of injury in a crash, sudden stop, or sudden maneuver.

# **Installing a Child Restraint System**



### 🛝 WARNING

- Before installing your Child Restraint System, always read and follow the instructions
  provided by the manufacturer of the Child Restraint System and in this manual to
  prevent serious injury or death if a collision occurs.
- If the vehicle head restraint prevents proper installation of a Child Restraint System, readjust or remove the head restraint for that seating position.



Check the seating surface and buckles before placing your child in the Child Restraint System to prevent burns. A Child Restraint System in a closed vehicle can become very hot.

After selecting a proper Child Restraint System for your child and checking that the Child Restraint System fits properly in a rear seating position, there are three general steps for proper installation:

- Properly secure the Child Restraint System to the vehicle. All Child Restraint Systems
  must be secured to the vehicle with a lap/shoulder belt or with a LATCH system in the
  rear seat of the vehicle.
- Make sure the Child Restraint System is firmly secured. After installing a Child Restraint
  System in the vehicle, push and pull the seat forwards and backwards and from side to
  side to verify that it is securely attached to the seat. A Child Restraint System secured
  with a seat belt should be installed as firmly as possible. However, Some side-to-side
  movement can be expected.
- Secure a child in the Child Restraint System. Make sure the child is properly strapped in the Child Restraint System according to the Child Restraint System manufacturer's instructions.

## Securing a Child Restraint System with the LATCH anchors system

The LATCH system connects a Child Restraint System to the vehicle during driving and in a collision. This system is designed to make installation of the Child Restraint System easier and reduce the possibility of improperly installing your Child Restraint System. The LATCH system uses anchors in the vehicle and attachments on the Child Restraint System. The LATCH system eliminates the need to use seat belts to secure the Child Restraint System to the rear seats.

Lower anchors are metal bars built into the vehicle. There are two lower anchors for each LATCH seating position that accommodates a Child Restraint System with lower attachments.

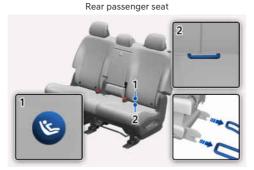
To use the LATCH system in your vehicle, install a Child Restraint System with LATCH attachments.

The Child Restraint System manufacturer provides you with instructions on how to use the Child Restraint System with its attachments for the LATCH anchors.



2C\_ALRSeatBeltLowerAnchorOverview

LATCH anchors have been provided in the left and right outboard rear seating positions. Their locations are shown in the illustration. There are no LATCH anchors provided for the center rear seating position.



2C ALRSeatBeltLowerAnchor

- 1. Lower anchor position indicator
- 2. Lower anchor

The lower anchor position indicator symbols are located on the left and right rear seatbacks to identify the positions of the lower anchors in your vehicle.

The LATCH anchors are located between the seatback and the seat cushion of the rear seat left and right outboard seating positions.



- Do not attempt to install a Child Restraint System using LATCH anchors in the rear center seating position. There are no LATCH anchors provided for this seat.
- Do not use the outboard seat anchors for the center seat. It may damage the anchors that may break or fail in a collision resulting in serious injury or death.
- Before installing the Child Restraint System, make sure that there are no objects (for example, toys, pens, wires) near the lower anchor area. Those objects may damage either the seat belt system or the Child Restraint System during installation. If necessary, have your vehicle inspected by an authorized HYUNDAI dealer.
- Take the following precautions when using the LATCH system:
  - Read and follow all installation instructions provided with your Child Restraint System.
  - To prevent the child from reaching and taking hold of unretracted seat belts, buckle
    all unused rear seat belts and retract the seat belt webbing behind the child. Children
    can be strangled if a shoulder belt becomes wrapped around their neck and the seat
    belt tightens.
  - Never attach more than one Child Restraint System to a single anchorage. This could cause the anchor or attachment to come loose or break.
  - Always have the LATCH system inspected by an authorized HYUNDAI dealer after a collision. A collision can damage the LATCH system and may not properly secure the Child Restraint System.
- Make sure that the combined weight of the child and the Child Restraint System is less than 65 lbs. (30 kg) for each LATCH system.

Installing a LATCH-compatible Child Restraint System in either of the rear outboard seating positions

- 1. Move the seat belt buckle away from the lower anchors.
- 2. Move any other objects away from the anchorages that could prevent a secure connection between the Child Restraint System and the lower anchors.
- 3. Place the Child Restraint System on the vehicle seat, then attach the seat to the lower anchors according to the instructions provided by the Child Restraint System manufacturer.
- 4. Follow the instructions of the Child Restraint System's manufacturer for proper installation and connection of the lower attachments on the Child Restraint System to the lower anchors.

## Securing a Child Restraint System seat with tether anchor system



### MARNING.

Take the following precautions when installing the top tether:

- Read and follow all installation instructions provided with your Child Restraint System.
- · Never attach more than one Child Restraint System to a single tether anchor. This could cause the anchor or attachment to come loose or break.
- Only attach the tether strap to the correct tether anchor for that seating position.
- · Make sure that the Child Restraint System anchors withstand the combined weight of the child and the Child Restraint System of less than 65 lbs. (30 kg) for each LATCH system.
- Do not use them for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.



First secure the child restraint with the LATCH lower anchors or the seat belt. If the child restraint manufacturer recommends that the top tether strap be attached, attach and tighten the top tether strap to the top tether strap anchor.

Tether anchors are located on the rear of the second row seatbacks and third row seatbacks.

#### Installing the tether anchor

1. Route the Child Restraint System top tether strap over the seatback. Route the tether strap under the head restraint and between the head restraint posts, or route the tether strap over the top of the vehicle seatback. Make sure the strap is not twisted.

2. Connect the tether strap hook to the tether anchor, then tighten the top tether strap according to the instructions of your Child Restraint System's manufacturer to firmly secure the Child Restraint System.



3. Check the Child Restraint System is secure by pushing and pulling the seat forward and back and side-to-side.

# Securing a Child Restraint System with a lap/shoulder belt



When not using the LATCH system, all Child Restraint Systems must be secured to a rear seat using the lap/shoulder belt.



- Always place a rearward-facing Child Restraint System in the rear seat of the vehicle.
- Placing a rearward-facing child restraint in the front seat may result in serious injury or death if the Child Restraint System is struck by an inflating airbag.

### Automatic locking mode

Since all passenger seat belts move freely under normal conditions and only lock under extreme or emergency conditions (emergency locking mode), you must manually pull the seat belt all the way out to shift the retractor to the automatic locking mode to secure a Child Restraint System.

The automatic locking mode will help prevent the normal movement of the child in the vehicle from causing the seat belt to loosen and compromise the Child Restraint System. To install a Child Restraint System on the rear seats:

- Place the Child Restraint System on a rear seat and route the lap/shoulder belt around or through the Child Restraint System, following the Child Restraint System manufacturer's instructions. Make sure the seat belt webbing is not twisted.
   For more information, refer to the 'Passenger and rear seat belts - 3-point system with convertible locking retractor' section in this chapter.
- 2. Fasten the lap/shoulder belt latch into the buckle. Check a distinct "click" sound is heard.



### NOTICE

Position the release button so it is easy to access in an emergency.

3. Pull the shoulder portion of the seat belt all the way out. When the shoulder portion of the seat belt is fully extended, it shifts the retractor to the automatic locking (child restraint) mode.



4. Slowly allow the shoulder portion of the seat belt to retract and listen for an audible "clicking" or "ratcheting" sound. If no distinct sound is heard, repeat Step 3 and 4.



2C ALRSeatBeltInstall 4

- 5. Remove as much slack from the belt as possible by pushing down on the Child Restraint System while feeding the shoulder belt back into the retractor.
- 6. Push and pull on the Child Restraint System to confirm that the seat belt is holding it firmly in place. If it is not, release the seat belt and repeat Step 2 through 6.
- 7. Double check that the retractor is in the automatic locking mode by attempting to pull more of the seat belt out of the retractor. If you cannot, the retractor is in the automatic locking mode.

To remove the Child Restraint System, press the release button on the buckle and then pull the seat belt out of the Child Restraint System and allow the seat belt to retract fully.



## MARNING

Make sure that the retractor is in the automatic locking mode. Otherwise, the child restraint may move when your vehicle turns or stops suddenly. A child may be seriously injured or killed if the child restraint is not properly anchored in the vehicle including manually pulling the seat belt all the way out to shift the retractor to the automatic locking mode.

#### NOTICE

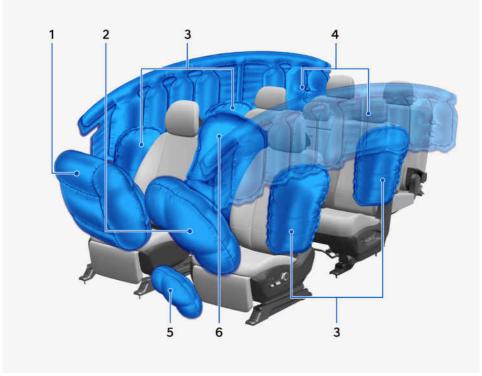
When the seat belt is allowed to retract to its fully stowed position, the retractor automatically switches from the automatic locking mode to the emergency lock mode for normal adult usage.

# Airbag - Supplemental Restraint System (SRS)

Your vehicle is equipped with a Supplemental Airbag System for the driver's seat and front passenger's seats.

The front airbags are designed to supplement the three-point seat belts. For these airbags to provide protection, seat belts must be properly worn at all times when driving.

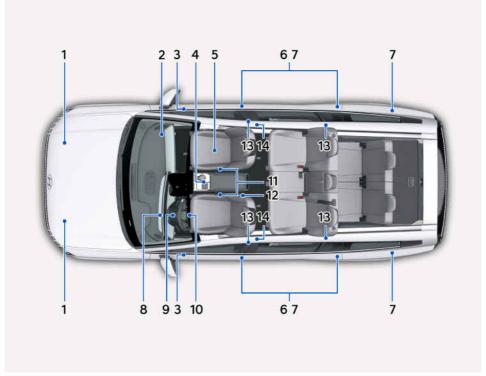
You can be severely injured or killed in a crash if you are not wearing a seat belt. Airbags are built into the vehicle as a supplementary system. They are not intended as a replacement for wearing 3-point seat belts. Also, airbags are not designed to deploy in every collision. In some crashes, the seat belts are the only restraint protecting you.



1C\_AirbagOverview

- 1. Passenger's front airbag
- 2. Driver's front airbag
- 3. Side airbag
- 4. Curtain airbag
- 5. Driver's knee airbag
- 6. Front center side airbag

### **SRS** Components



1C\_AirbagPartsOverview

- 1. Front impact sensors
- 2. Passenger's front airbag module
- 3. Side impact sensors (pressure)
- 4. SRS control module (SRSCM)/Rollover sensor
- 5. Occupant classification system
- 6. Side impact sensors (acceleration)
- 7. Retractor pre-tensioner
- 8. Airbag warning light
- 9. Driver's knee airbag module
- 10. Driver's front airbag module
- 11. Driver's and front passenger's seatbelt buckle sensors
- 12. Front center side airbag
- 13. Side airbag module
- 14. Curtain airbag module

## **Airbag Safety Precautions**

Passengers must not move out of or change seats while the vehicle is moving. A passenger who is not wearing a seat belt during a collision or emergency stop can be

thrown against the inside of the vehicle, against other occupants, or be ejected from the vehicle.

**Do not use any accessories on seat belts.** Devices claiming to improve occupant comfort or reposition the seat belt can reduce the protection provided by the seat belt and increase the chance of serious injury in a collision.

**Do not modify the front seats.** Modification of the front seats may interfere with the operation of the SRS sensing components or side airbags.

**Do not place items under the front seats.** Placing items under the front seats may interfere with the operation of the SRS sensing components and wiring harnesses.

**Do not cause impact to the doors.** Impact to the doors when the Start/Stop button is in the POWER ON or DRIVE READY position may cause the airbags to inflate.

**Modifications to accommodate disabilities.** If you require modification to your vehicle to accommodate a disability, contact the HYUNDAI Customer Connect Center at 800-633-5151.



### 🗥 WARNING

### AIRBAG SAFETY PRECAUTIONS

- Always use seat belts and Child Restraint Systems every trip, every time, everyone!
   Even with airbags, you can be seriously injured or killed in a collision if you are improperly belted or not wearing your seat belt when the airbag inflates.
- Never place a child in any Child Restraint System or booster seat in the front passenger seat, unless the airbag is deactivated.
  - An inflating airbag could forcefully strike the infant or child causing serious or fatal injuries.
- ABC Always Buckle Children under age 13 in the back seat. It is the safest place for children of any age to ride. If a child age 13 or older must be seated in the front seat, he or she must be properly belted and the seat should be moved as far back as possible.
- Make sure that all occupants sit upright with the seatback in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended, and their feet on the floor until the vehicle is parked and the vehicle is turned off. If an occupant is out of position during a crash, the rapidly deploying airbag may forcefully contact the occupant causing serious or fatal injuries.
- Never sit or lean unnecessarily close to the airbags or lean against the door or center console.
  - Move your seat as far back as possible from front airbags, while still maintaining control of the vehicle. The U.S. National Highway Traffic Safety Administration (NHTSA) recommends that drivers allow at least 10 in. (25 cm) between the center of the steering wheel and the chest.

# Adding equipment to or modifying your airbag equipped vehicle

If you modify your vehicle by changing your vehicle's frame, bumper system, front end or side sheet metal, or ride height, this may affect the operation of your vehicle's SRS.

## Airbags system operation

The Supplemental Restraint System Control Module (SRSCM) continually monitors all SRS components while the Start/Stop button is DRIVE READY to determine if a crash impact is severe enough to require airbag deployment or pretensioner seat belt deployment.

During a moderate to severe frontal collision, sensors detect the vehicle's rapid deceleration. If the rate of deceleration is high enough, the SRSCM inflates the front airbags with the force needed.

The front airbags help protect the driver and front passenger by responding to frontal impacts in which seat belts alone cannot provide adequate restraint. When needed, the side airbags help provide protection in the event of a side impact or rollover by supporting the side upper body area.

- Airbags are activated (able to inflate if necessary) only when the Start/Stop button is in the POWER ON or DRIVE READY position, and it may be activated within 3 minutes after the vehicle is turned off.
- Airbags inflate in the event of certain frontal or side collisions to help protect the occupants from serious physical injury.
- There is no single speed at which the airbags will inflate. Generally, airbags are
  designed to inflate based upon the severity of a collision and its direction. Airbag
  deployment also depends on a number of other factors including vehicle speed, angles
  of impact and the density and stiffness of the vehicles or objects which your vehicle
  impacts during a collision. The determining factors are not limited to those mentioned
  above.
- The front airbags completely inflate and deflate in an instant. It is virtually impossible
  for you to see the airbags inflate during an accident. It is much more likely that you
  simply see the deflated airbags hanging out of their storage compartments after the
  collision.
- In addition to inflating in serious side collisions, vehicles equipped with a rollover sensor, side and/or curtain airbags inflate if the sensing system detects a rollover.
   When a rollover is detected, curtain airbags remain inflated longer to help provide protection from ejection, especially when used in conjunction with the seat belts.
- To help provide protection, the airbags must inflate rapidly. The speed of airbag
  inflation is a consequence of extremely short time in which the airbag inflates between
  the occupant and the vehicle structures before the occupant impacts those structures.
  This speed of inflation reduces the risk of serious or life-threatening injuries and is thus
  a necessary part of airbag design.
  - However, the rapid airbag inflation may also cause injuries that include facial abrasions, bruises, and broken bones because the inflation speed also causes the airbags to expand with great force.
- There are even circumstances under which contact with the airbag may cause fatal
  injuries, especially when the occupant is positioned excessively close to the airbag.

You can take steps to reduce the risk of being injured by an inflating airbag. The greatest risk is sitting too close to the airbag. An airbag needs about 10 in. (25 cm) of space to inflate. NHTSA recommends that drivers allow at least 10 in. (25 cm) between the center of the steering wheel and the chest.

1. When the SRSCM detects a sufficiently severe impact to the front of the vehicle, it automatically deploys the front airbags.



2C\_DriverAirbagProcedure

- 2. Upon deployment, tear seam in the pad cover separates from the expansion of the airbags.
  - A fully inflated airbag, in combination with a properly worn seat belt, slows the driver's or the front passenger's forward motion, reducing the risk of head and chest injury.



2C\_DriverAirbagProcedure\_2

3. After complete inflation, the airbag immediately starts deflating, enabling the driver to maintain forward visibility and steer or operate other controls.



2C DriverAirbagDeployment

Passenger's front airbag



2C Passenger Airbag Deployment



## MARNING

- To reduce the risk of serious injury or death from an inflating airbag:
  - Never place a child restraint in the front passenger seat. Always properly restrain children under age 13 in the rear seats of the vehicle.
  - Adjust the front passenger's and driver's seats as far to the rear as possible while allowing you to maintain full control of the vehicle.
  - Hold the steering wheel with hands at the 9 o'clock and 3 o'clock positions.
  - Never place anything or anyone between the airbag and the seat occupant.
  - Do not allow the front passenger to place their feet or legs on the dashboard.
- To prevent objects from becoming dangerous projectiles when the passenger's airbag inflates:
  - Do not install or place any objects (drink holder, CD holder, stickers, etc.) on the front passenger's panel above the glove box where the passenger's airbag is located.
  - Do not install a container of liquid air freshener near the instrument cluster or on the instrument panel surface.

# What to expect after an airbag inflates

After a frontal or side airbag inflates, it deflates very quickly. Airbag inflation does not prevent the driver from seeing out of the windshield or being able to steer. Curtain airbags may remain partially inflated for some time after they deploy.



### WARNING

After an airbag inflates, take the following precautions:

- Open your windows and doors as soon as possible after impact to reduce prolonged exposure to the powder released by the inflating airbag.
- Do not touch the airbag storage area's internal components immediately after an airbag has inflated. The parts that come into contact with an inflating airbag may be very hot.
- Always wash exposed skin areas thoroughly with cold water and mild soap.
- Have an authorized HYUNDAI dealer inspect your vehicle and replace components as required before operating your vehicle again. Airbags are designed to be used only.

#### Noise and smoke from inflating airbag

When the airbags inflate, they make a loud noise and may release powder inside the vehicle. After the airbag inflates, you may feel discomfort while breathing. This may be due to the impact of the airbag or the seat belt with your chest and it may also be due to breathing residual powder in the air and around your vehicle. The powder may aggravate asthma for some people. If you experience breathing problems after an airbag deployment, seek medical attention immediately.

Though the powder is nontoxic, it may cause irritation to the skin, eyes, nose, throat, etc. If this is the case, wash and rinse with cold water immediately and seek medical attention if the symptoms persist.

## Do not install a Child Restraint System on the front passenger's seat



Even though your vehicle is equipped with the Occupant Classification System (OCS), never install a Child Restraint System in the front passenger's seat. An inflating airbag may forcefully strike a child or child restraint resulting in serious or fatal injury.



### MARNING

Never use a rearward facing child restraint on a seat protected by an ACTIVE AIRBAG in front of it. It may result in death or serious injury to the CHILD. Children should always ride in the rear seats.

# SRS warning light



The SRS airbag warning light on the instrument panel displays the airbag symbol in the illustration. The light indicates if there is a potential problem with your airbag system, which could include your side and/or curtain airbags used for rollover protection.



If your SRS malfunctions, the airbags may not inflate properly during a collision increasing the risk of serious injury or death.

Your SRS malfunctions in the following conditions:

- The light does not turn on for about three to six seconds when the Start/Stop button is in the POWER ON position.
- The light stays on after illuminating for about three to six seconds.
- · The light comes on while the vehicle is moving.
- · The light blinks when the vehicle is running.

Have an authorized HYUNDAI dealer inspect the SRS as soon as possible.

### Airbag Location



# **MARNING**

To reduce the risk of serious injury or death from inflating front airbags:

- Seat belts must be worn at all times to help keep occupants positioned properly.
- · Move your seat as far back as possible from front airbags, while still maintaining control of the vehicle.
- Never lean against the door or center console.
- Hold the steering wheel at the 9 o'clock and 3 o'clock positions, to minimize the risk of injuries to your hands and arms.
- Do not allow the front passenger to place their feet or legs on the dashboard.
- Never place any objects (such as dashboard cover, mobile phone holder, cup holder, perfume or stickers) over or near the airbag modules on the steering wheel, instrument panel, windshield glass, and the front passenger's panel above the glove box. Such objects may cause harm if the vehicle is in a collision severe enough to cause the airbags to deploy.
- Do not attach any objects on the front windshield and inside mirror.

To reduce the risk of serious injury or death from an inflating side and curtain airbag:

- Seat belts must be worn at all times to help keep occupants positioned properly.
- Do not allow passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and seats.
- Do not use any accessory seat covers. It may reduce or prevent the effectiveness of the
- Do not hang other objects except clothes. In a crash it may cause vehicle damage or personal injury especially when airbag is inflated.
- Do not place any objects over the airbag location or between the airbag and yourself. Also, do not attach any objects around the area the airbag inflates such as door, side door glass, and front and rear pillar.
- Do not place any objects between the door and the seat. They may become dangerous projectiles if the side airbag inflates.
- Do not install any accessories on the side or near the side airbags.
- Do not cause an impact to the doors when the Start/Stop button is in the POWER ON or DRIVE READY position because the side airbags can inflate.
- If the seat or seat cover is damaged, have your vehicle serviced by an authorized HYUNDAI dealer.
- Properly secure a Child Restraint System as far away from the door as possible
- Do not open or repair the side curtain airbags.

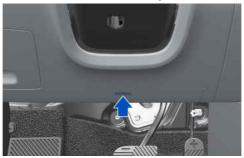
# Driver's and passenger's front airbags

Driver's front airbag



2C\_DriverAirbag

Driver's knee airbag



2C\_KneeAirbag

Passenger's front airbag



2C\_PassengerAirbag

The SRS consists of airbags located in the center of the steering wheel, in the driver's side lower crash pad below the steering wheel, and the passenger's side front panel pad above the glove box.

The airbag locations are embossed with the letters AIRBAG.

The purpose of the SRS is to provide the vehicle's driver and front passenger with additional supplemental protection that the seat belt system does not provide in case of a frontal impact of sufficient severity.

The SRS sensors provide the ability to control the SRS deployment based on whether or not the seat belts are fastened, and how severe the impact is.

The SRS offers the ability to control the airbag inflation within two levels. A first stage level is provided for moderate-severity impacts. A second stage level is provided for more severe impacts.

Failure to properly wear seat belts may increase the risk or severity of injury in a collision.

## Side airbags

Front/Rear side airbag

2C\_SideAirbagLabel

Front center side airbag (for driver's seat)



2C\_SideAirbagLabel\_2



Side airbags are located in the outboard of front and rear seats. Additionally, a front center side airbag is located in the inboard side of the driver seatback.

The side airbags are designed to deploy during certain side impact collisions, depending on the crash severity.

The side airbags on both sides of the vehicle are designed to deploy when a rollover is detected by a rollover sensor.

The side airbags are not designed to deploy in all side impact or rollover situations.

## Curtain airbags





Curtain airbags are located along both sides of the roof rails above the front and rear doors.

They are designed to help protect the heads of the front seat occupants and the rear outboard seat occupants in certain side impact collisions.

The curtain airbags are designed to deploy during certain side impact collisions, depending on the crash severity.

For vehicles equipped with a rollover sensor the side and/or curtain airbags and pretensioners on both sides of the vehicle may deploy if a rollover or possible rollover is detected.

The curtain airbags are not designed to deploy in all side impact or rollover situations.

## **Occupant Classification System (OCS)**



2C OCSIndicator

The OCS is designed to help detect the presence of a properly seated front passenger and determine if the passenger's front airbag should be enabled (ready to inflate if required) or not.

The purpose is to help reduce the risk of injury or death from an inflating airbag to certain front passenger seat occupants, such as children, by requiring the airbag to be automatically turned off.

# Main components of the OCS

- A detection device located within the front passenger seat cushion.
- Electronic system to determine whether the passenger airbag systems should be activated or deactivated.
- An indicator light located on the instrument panel that illuminates the words PASSENGER AIR BAG OFF indicating the front passenger airbag system is deactivated.
- The instrument panel airbag indicator light is interconnected with the OCS.

Front passenger seat adult occupants who are properly seated and wearing the seat belt properly, should not cause the passenger airbag to be automatically turned off. For smaller adults, it may turn off. However, if the occupant does not sit in the seat properly (for example, not sitting upright, sitting on the edge of the seat, or being out of position), this may cause the sensor to turn the front passenger airbag off.

You can find the **PASSENGER AIR BAG OFF** indicator on the overhead console panel. This system detects one of the four conditions and activates or deactivates the front passenger airbag based on these conditions.

Always make sure that you and all occupants are seated properly and wearing the seat belt properly for the most effective protection by the airbag and the seat belt.

### Condition and operation in the front passenger OCS

Condition detected by the OCS	PASSENGER AIR BAG OFF indicator light	SRS warning light	Front passenger airbag
Adult*1	Off	Off	Activated
Infant or child under 12 months old*4 with a child restraint system*2*3	On	Off	Deactivated
Unoccupied	On	Off	Deactivated
Problems with OCS	Off	On	Activated

<sup>\*1:</sup> The system judges a person of adult size as an adult. When a smaller adult sits in the front passenger seat, the system may recognize him/her as a child depending on his/her physique and posture.

<sup>\*2:</sup> Do not allow children to ride in the front passenger seat. When a larger child who has outgrown a Child Restraint System sits in the front passenger seat, the system may recognize him/her as an adult depending on his/her physique or sitting position.

<sup>\*3:</sup> Never install a Child Restraint System on the front passenger seat.

<sup>\*4:</sup> The PASSENGER AIR BAG OFF indicator may turn ON or OFF when a child above 12 months to 12 years old (with or without Child Restraint System) sits in the front passenger seat. This is a normal condition.



### WARNING

Riding in an improper position or placing weight on the front passenger's seat when it is unoccupied by a passenger, adversely affects the OCS. To reduce the risk of serious injury or death:

· Never put a heavy load in the front seat or seatback pocket, or hang any items on the front passenger seat.



2C\_OCSWarning

• Do not use car seat accessories such as thick blankets and cushions that cover up the car seat surface.



2C\_OCSWarning\_9

· Do not place electronic devices such as laptops, DVD player, or conductive materials such as water bottles on the front passenger seat.



2C OCSWarning 8

· Do not use electronic devices such as laptops and satellite radios that use inverter chargers when seated in the front passenger seat.

Make sure the seat has been completely dried before driving the vehicle. If a large
quantity of liquid has been spilled on the front passenger seat, the airbag warning light
may illuminate or malfunction.



2C\_OCSWarning\_10

- Do not place sharp objects on the front passenger seat. These may damage the occupant detection system, if they puncture the seat cushion.
- Do not place any items under the front passenger seat.
- Never place your feet on the front passenger seatback.



2C OCSWarning 4

• Never sit with your hips shifted toward the front of the seat.



2C\_OCSWarning\_2

Never ride with the seatback reclined when the vehicle is moving.



2C\_OCSWarning\_5

• Never place your feet or legs on the dashboard.



2C\_OCSWarning\_3

• Never lean on the door or center console or sit on one side of the front passenger seat.



2C\_OCSWarning\_6

• Do not sit on the passenger seat wearing heavily padded clothes such as ski wear and hip protector.



2C OCSWarning 7

 When changing or replacing the seat or seat cover, use original items only. The OCS has been developed based on using original HYUNDAI car seats only. Altering or changing the authentic parts may result in system malfunction and increase risk of injury in a collision. Any of the above may interfere with the proper operation of the OCS sensor thereby increasing the risk of an injury in a crash.

#### Proper seated position for OCS



2C HowToUseOCS

If the PASSENGER AIR BAG OFF indicator is on when an adult is seated in the front passenger seat, move the Start/Stop button to the OFF position and ask the passenger to sit properly. Restart the vehicle and have the person remain in that position. This allows the system to detect the person and to enable the passenger airbag.



## WARNING

- Never allow an adult passenger to ride in the front passenger seat when the PASSENGER AIR BAG OFF indicator is illuminated. During a collision, the airbag does not inflate if the indicator is illuminated. If the indicator is illuminated while an adult is seated in the front passenger seat, follow the steps in the previous paragraph to have the passenger reposition themselves in the seat.
- If the PASSENGER AIR BAG OFF indicator remains illuminated after the passenger sits in the proper seating position, have the passenger sit in the rear seat of the vehicle instead.

#### NOTICE

The **PASSENGER AIR BAG OFF** indicator generally illuminates for about 4 seconds after the Start/Stop button is in the POWER ON or DRIVE READY position. But, if the Start/Stop button is in the POWER ON or DRIVE READY position within 3 minutes after the vehicle is turned OFF, the indicator does not illuminate. If the front passenger seat is occupied, the OCS classifies the front passenger after several seconds.

#### **SRS Care**

The SRS is virtually maintenance-free and there are no parts you can safely service by yourself. If the SRS airbag warning light does not illuminate when the Start/Stop button is in the POWER ON position or continuously remains on, have the system immediately inspected by an authorized HYUNDAI dealer.

Any work on the SRS system, such as removing, installing, repairing, or any work on the steering wheel, the front passenger's panel, front seats, and roof rails should be performed by an authorized HYUNDAI dealer. Improper handling of the SRS system may result in serious personal injury or death.



### WARNING

To reduce the risk of serious injury or death:

- Do not attempt to modify or disconnect the SRS components or wiring, including the addition of any kind of badges to the pad covers or modifications to the body structure.
- Do not place objects over or near the airbag modules on the steering wheel, instrument panel, and the front passenger's panel above the glove box.
- Clean the airbag pad covers with a soft cloth moistened with water. Solvents or cleaners may adversely affect the airbag covers and proper deployment of the system.
- Replace inflated airbags by an authorized HYUNDAI dealer.
- If components of the airbag system must be discarded, or if the vehicle must be scrapped, observe safety precautions. Consult an authorized HYUNDAI dealer for the necessary information.

# **Airbag Warning Labels**





2C\_AirbagWarningLabel

Airbag warning labels, required by the U.S. NHTSA, are attached to alert the driver and passengers of potential risks of the airbag system. Be sure to read all of the information about the airbags that are installed on your vehicle in this Owner's Manual.

# **Airbag Operation Conditions**

There are certain types of crashes in which the airbag would not deploy including rear impacts and second or third collisions in multiple impact crashes, as well as low speed impacts. Damage to the vehicle indicates a collision energy absorption, and is not an indicator of whether or not an airbag should have inflated.

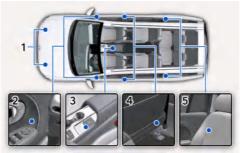
## Airbag collision sensors



### MARNING

To reduce the risk of an airbag deploying unexpectedly and causing serious injury or death:

- · Do not hit or allow any objects to impact the locations where airbags or sensors are installed.
- Do not perform maintenance on or around the airbag sensors. If the location or angle of the sensors is changed, the airbags may deploy when they should not or may not deploy.
- Do not install bumper guards with non genuine HYUNDAI or non-equivalent parts. It may adversely affect the collision and airbag deployment performance.
- Press the Start/Stop button to the OFF or POWER ON position and wait for 3 minutes before the vehicle is towed to prevent unintended airbag deployment.
- Have all airbag repairs are conducted by an authorized HYUNDAI dealer.



2C AirbagSensorOverview

- 1. Front impact sensor
- 2. Side impact sensor (Pressure): Front door
- 3. SRS control module/Rollover sensor
- 4. Side impact sensor (Acceleration): B-Pillar
- 5. Side impact sensor (Acceleration): C-pillar

## Airbag inflation conditions

### Front airbags



2C\_AirbagOperatingConditionFrontAirbag

Front airbags are designed to inflate in a frontal collision depending on the severity of impact.

#### Side and curtain airbags



2C\_AirbagOperatingConditionSideAirbag



2C\_SideCurtainAirbagDeployment

Side and curtain airbags are designed to inflate when an impact is detected by side collision sensors depending on the severity of impact resulting from a side impact collision.

Although the driver's and front passenger's airbags are designed to inflate in frontal collisions and side and curtain airbags are designed to inflate in side impact collisions, airbags may inflate in other types of collisions if the sensors detect a sufficient impact.

Also, the side and curtain airbags inflate when a rollover is detected by a rollover sensor.

If the vehicle chassis is impacted by bumps or objects on unimproved roads, the airbags may deploy. Drive carefully on unimproved roads or on surfaces not designed for vehicle traffic to prevent unintended airbag deployment.

## Airbag non-inflation conditions

In certain low-speed collisions, the airbags may not deploy. The airbags are designed
not to deploy in such cases because they may not provide benefits beyond the
protection of the seat belts.



2C\_AirbagNonOperatingConditionMinorCrash

 Front airbags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact.



 ${\tt 2C\_AirbagNonOperatingConditionRearCrash}$ 

- Front airbags may not inflate in side impact collisions, because occupants move in the direction of the collision.
  - Side, curtain airbags and the front center side airbags may inflate depending on the severity of impact.



2C\_AirbagNonOperatingConditionSideCrash

 In an angled collision, the force of impact may position the occupants in a direction where the airbags would not be able to provide any additional benefit, and thus the sensors may not deploy any airbags.



2C AirbagNonOperatingConditionSidlingCrash

Just before impact, drivers often brake heavily. Such heavy braking lowers the front
portion of the vehicle causing it to 'nosedive'. This is particularly important when the
vehicle in front has a higher ground clearance. Airbags may not inflate if your vehicle is
in a 'nosedive' condition because the collision forces detected by the sensors may have
been significantly reduced.



2C\_AirbagNonOperatingConditionTruckCrash

 Front airbags may not inflate in rollover crash because front airbag deployment would not provide additional occupant protection.

The side and curtain airbags may inflate in a rollover situation, when detected by the rollover sensor.



2C\_AirbagNonOperatingConditionTurnoverCrash

• Airbags may not inflate if the vehicle collides with objects such as utility poles or trees, where the point of impact is concentrated and the collision energy is absorbed by the vehicle structure.



 ${\color{red}2C\_AirbagNonOperatingConditionPollCrash}$ 

# 4. Instrument Cluster

This chapter explains the vehicle information, warning lights and status indicators that appear on the cluster.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to your vehicle.
- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference quide.

## **Instrument Cluster Overview**



- 1. Speedometer
- 2. Warning and indicator lights
- 3. Charge/Power gauge
- 4. Outside temperature
- 5. Cluster display
- 6. Gear shift indicator
- 7. Distance to empty
- 8. Battery SOC (State of Charge) gauge
- 9. Regenerative braking level indicator
- 10. Odometer

#### **Instrument Cluster Control**

### Instrument cluster theme selection

#### Infotainment system

You can adjust the theme of the instrument cluster in the infotainment system. Select Setup > Cluster/Head-Up Display > Cluster > Cluster Theme Selection.

#### Instrument panel illumination

#### **Control switch**



When the vehicle's parking lights or headlights are on, press the illumination control switch to adjust the brightness of the instrument panel illumination.

When pressing the illumination control switch, the interior switch illumination intensity is also adjusted.

- The brightness of the instrument panel illumination is displayed.
- When the brightness setting reaches either the minimum or maximum level, a chime sounds.



#### MARNING.

Never adjust the instrument panel illumination while driving to prevent death, serious injury, or vehicle damage.

#### Infotainment system

You can adjust the brightness of the instrument panel illumination in the infotainment system. Select Setup > Cluster/Head-Up Display > Cluster > Illumination.



#### MARNING

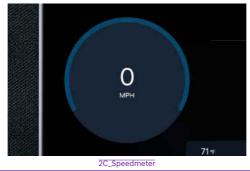
Never adjust the instrument cluster while driving. This could result in loss of control and lead to a crash that may cause death, serious injury, or vehicle damage.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

## **Gauges And Meters**

## **Speedometer**



The speedometer indicates the speed of the vehicle and is calibrated in miles per hour (MPH) and/or kilometers per hour (km/h).

## **Charge/Power Gauge**



The CHARGE/POWER gauge displays the charging and discharging status of the electric energy produced by the regenerative braking and the energy consumption of the electric motor.

- CHARGE: Shows the charging status of the electric motor when vehicle is decelerating or driving on a downhill road (being charged by the regenerative brakes). The more electric energy is charged, the lower the gauge level.
- POWER: Shows discharging status of the electric motor when vehicle is accelerating or driving on an uphill road. The more electric energy is discharged (used), the higher the gauge level.

## State of Charge (SOC) Gauge for High Voltage Battery



The SOC indicator is displayed at the bottom of the CHARGE/POWER gauge and shows the charge level of the high voltage battery as a percentage. The lower the number, the more the vehicle needs to be charged, and 100 % indicates a full charge.

- When the remaining battery of the high voltage battery is lower than 20 %, the High voltage battery level ( warning light will be displayed.
- When the High voltage battery level ( warning light is displayed, charge the vehicle.

#### NOTICE

After the warning light is displayed, immediately charge the vehicle at a nearby charging station. The vehicle may not operate properly depending on the driving speed, weather, and other driving conditions.

#### INFORMATION

- To find a nearby charging station, refer to the 'Using Electric Vehicle Functions' in chapter 6.
- Check if the SOC is enough before driving on highways.

## **Outside Temperature Gauge**



2C OutsideTemp

The outside ambient temperature appears in the lower portion of the cluster display. The temperature reads in Fahrenheit or Celsius depending on the units selected from the Settings menu in the infotainment system.

The temperature indicated on the instrument cluster may not change as quickly as the outside temperature. Select Setup > General > Units > Temperature Unit > °C/°F.

Both the temperature unit on the cluster display and climate control information screen is changed.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference quide.

#### Odometer



2C Odometer

The odometer indicates the total distance that the vehicle has been driven and is used to determine when periodic maintenance is required.

### **Distance To Empty**



2C DistanceToEmpty

The distance to empty refers to the distance that can be driven by the current charged battery level and is displayed on the bottom of the cluster display while driving the electric vehicle.

## Factors affecting the distance to empty

The distance to empty vary depending on many factors such as driving habits, power usage, driving conditions, and high voltage battery. The distance to empty may differ from the certified figures as it reflects the combined result of the factors listed.

- Driving habits: The driving speed and tendency of accelerating and decelerating. High speed driving or frequent accelerating and decelerating reduces the distance to empty.
- Power usage: Additional power use, such as the air conditioner, heater, lights, etc. As
  the power usage increases, the distance to empty reduces.
- Driving conditions: The weather, temperature, and terrain. If you drive in snow/rain/ strong wind or low temperature, the distance to empty will be reduced. The distance to empty will also be reduced when driving uphill or on slippery or rough roads.
- High voltage barttery energy: Proportional to the SOC, but may vary depending on the battery temperature and the State of Health (SOH) of a battery.

### Change in the distance to empty when 100 % charged

In case the distance to empty has been reduced due to learning of the driving habit or the driving conditions, you can increase the distance to empty again by continuously driving following the 'Tips for enhancing the distance to empty'.

- Resetting the previously learned driving patterns at the service center may increase the distance to empty displayed on the bottom of the instrument cluster. However, the distance to empty may not be accurate until sufficient distance has been traveled to relearn driving patterns.
- If the high voltage battery temperature is low in winter, the distance to empty reduces but it is not a permanent change. The distance to empty will increase again once the temperature rises.
- If you reduce the power usage, the distance to empty will increase.
- Natural degradation may occur with the high voltage battery depending on the number of years the vehicle is used. This may reduce the distance to empty.

### When setting a destination

When the destination is set, the distance to empty may change. The distance to empty may vary significantly based on traffic conditions or driving speed.

## Tips for enhancing the distance to empty

The distance to empty vary depending on the charge level of the high voltage battery, weather, temperature, duration of the battery use, terrain, driving habits, etc.

- The air resistance increases rapidly as vehicle speed increases, so avoid speeding to increase the distance to empty and electric energy economy.
- Rapid acceleration consumes a lot of driving energy and rapid deceleration limits the regenerative braking. Gradually depress and release the accelerator pedal.
- Excessive heater or air conditioner operation will increase energy consumption from the high voltage battery. This may reduce the distance to empty. Therefore, set the cabin temperature to 72 °F (22 °C) AUTO level 2. Especially in winter, reducing heating and using heated seats instead can significantly increase the distance to empty. Turn off the air conditioner or heater if you do not need them.
- When using the air conditioner or heater, the energy consumption is reduced if recirculation mode is selected instead of fresh mode.
- Close the windows while driving.
- When using the air conditioner or heater while driving alone, use the DRIVER ONLY function.

- Always maintain specified tire pressures and use tires for electric vehicles.
- Do not use unnecessary electrical components while driving.
- Do not load unnecessary items in the vehicle.
- Do not mount parts that may increase air resistance.

## When the distance to empty is insufficient

- · When the high voltage battery level warning light is displayed, immediately charge the vehicle at a nearby charging station.
- When the battery level is 0 %, do not try to drive. Move to a safe place and call for help.

#### **Gear Shift Indicator**



The Gear Shift Indicator indicates the current gear or P (Park).

### Regenerative braking level indicator



The regenerative brake indicates the level of the regenerative braking that you set. And it also indicates Smart regenerative system's operation status.

For more information, refer to the 'Regenerative Braking System (Paddle Shifter)' section in chapter 6.

## **Warnings And Indicators**

## **Warning and Indicator Lights**



# **CAUTION**

If the warning light illuminates while driving or does not go off, have your vehicle inspected by an authorized HYUNDAI dealer.

(1)	READY	(2)	
(3)	5	(4)	<b>*</b>
(5)	*	(6)	
(7)	UP BRAKE	(8)	ABS
(9)	BRAKE ABS	(10)	<b>⊖!</b>
(11)	<del>- •</del>	(12)	(!)
(13)	EPB	(14)	AUTO HOLD
(15)	101 101	(16)	<b>♣</b>
(17)	<b>¥</b> ⊖	(18)	<b>/≘</b> \
(19)	$\Theta$	(20)	
(21)	<u></u>	(22)	

(23)		(24)	<del>.</del> Ф-
(25)	-0	(26)	<b>?</b>
(27)	OFF OFF	(28)	0
(29)	<b>++</b>	(30)	-00-
(31)		(32)	<b>≣</b> C AUTO
(33)	(L)	(34)	**
(35)		(36)	

## (1) READY Ready indicator

This indicator illuminates:

When the vehicle is ready to be driven.

- ON: Normal driving is possible
- · OFF: Normal driving is not possible, or a problem has occurred
- · Blinking: Emergency driving

When the ready indicator goes OFF or blinks, there is a problem with the system. If this occurs, have your vehicle be inspected by an authorized HYUNDAI dealer.

## 

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- · When there is a problem with related parts of the vehicle control system, such as sensors, etc.
- When an actuator, electric compressor for air conditioning, etc. malfunctions.

When the warning light illuminates while driving, or does not go OFF after starting the vehicle, have your vehicle be inspected by an authorized HYUNDAI dealer.

## (3) F Charging indicator light

This indicator illuminates:

When charging the high voltage battery.

## (4) A Seat belt warning light

This warning light illuminates:

When the seat belt is not fastened.

For more information, refer to the 'Seat Belts' section in chapter 3.

## (5) \* Airbag warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for 3-6 seconds and then goes off.
- When there is a malfunction with the Safety Restraint System (SRS). If the Airbag warning light remains illuminated while driving, have your vehicle inspected by an authorized HYUNDAI dealer.

## (6) (1) Regenerative brake warning light

This warning light illuminates:

When the regenerative brake does not operate and the brake does not perform well. This causes the Parking Brake warning light (red) and Regenerative Brake warning light (yellow) to illuminate simultaneously.

If this occurs, drive safely and have your vehicle be inspected by an authorized HYUNDAI dealer.

The operation of the brake pedal may be more difficult than normal and the braking distance may increase.

## (7) Parking brake & Brake fluid warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off once the parking brake is released.
- Whenever the parking brake is applied.
- Whenever the regenerative brake does not operate.
- · Whenever the brake fluid level in the reservoir is low.
  - If the warning light illuminates with the parking brake released, it indicates the brake fluid level in the reservoir is low.
  - With the vehicle stopped, check the brake fluid level immediately and add fluid as required. (For more information, refer to the 'Brake Fluid' section in chapter 9.) If a brake fluid leak is found, or if the warning light remains on, or if the brakes do not operate properly, do not drive the vehicle. Have your vehicle inspected by an authorized HYUNDAI dealer.

If the parking brake warning light illuminates with the parking brake released, it indicates that the brake fluid level is low. Have your vehicle inspected by an authorized HYUNDAI dealer.

#### INFORMATION

If your vehicle is equipped with the dual-diagonal braking system, this means you still have braking on two wheels even if one of the dual systems should fails.

- With only one of the dual systems working, more than normal pedal travel and greater pedal force are required to stop the vehicle. Also, the vehicle does not stop in a short distance if only a portion of the braking system is working.
- If you experience a malfunction with the braking system while driving, attempt to slow your vehicle by coasting. You may be able to reduce your vehicle speed by manually downshifting to a lower gear.

## (8) ABS Anti-lock Brake System (ABS) warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Whenever there is a malfunction with the ABS.

The hydraulic braking system still operates even if there is a malfunction with the ABS. If the ABS warning light remains illuminated while driving, have your vehicle inspected by an authorized HYUNDAI dealer.

## (9) SPABS Electronic Brake Force Distribution (EBD) System warning light

These two warning lights illuminate at the same time while driving:

When the ABS and brake system does not work normally.

If both warning lights remain illuminated while driving, have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.



#### MARNING

- When both ABS and Parking brake warning lights are on, the braking system does not work normally and you may experience an unexpected and dangerous situation during sudden braking.
- Avoid high speed driving and abrupt braking.
- Have your vehicle inspected by an authorized HYUNDAI dealer.

#### INFORMATION

When the ABS warning light is on or both ABS and Parking brake warning lights are on, the speedometer, odometer, or tripmeter may not work. Also, the Motor Driven Power Steering (MDPS) warning light may illuminate and the steering effort may increase or decrease.

## (10) A Motor Driven Power Steering (MDPS) warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Whenever there is a malfunction with the MDPS.
   If the MDPS warning light remains illuminated while driving, have your vehicle inspected by an authorized HYUNDAI dealer.

### (11) 12 V Battery charging system warning light

This warning light illuminates:

When there is a malfunction with either the alternator or electrical charging system.

If there is a malfunction with electrical charging system:

- 1. Drive carefully to the nearest safe location and stop your vehicle.
- 2. Turn the vehicle off and check the electrical charging system.

If the Charging system warning light remains illuminated while driving, have your vehicle inspected by an authorized HYUNDAI dealer.

### (12) Low tire pressure warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- When one or more tires are significantly under-inflated.

This warning light remains ON after blinking for about 60 seconds, or repeatedly blinks ON and OFF at 3 second intervals:

When there is a malfunction with the TPMS.

If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

For more information, refer to the 'Tire Pressure Monitoring System (TPMS)' section in chapter 8.



#### WARNING

- The TPMS cannot alert you to severe and sudden tire damage caused by external factors.
- If you notice any vehicle instability, immediately take your foot off the accelerator
  pedal, apply the brakes gradually with light force, and slowly move to a safe position off
  the road.

## (13) EPB Electronic Parking Brake (EPB) warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Whenever there is a malfunction with EPB.

#### 112 Instrument Cluster

If the EPB warning light remains illuminated while driving, have your vehicle inspected by an authorized HYUNDAI dealer.

#### INFORMATION

The EPB warning light may illuminate when the Electronic Stability Control (ESC) indicator light comes on to indicate that ESC is not working properly. This does not indicate malfunction of EPB.

## 

This indicator light illuminates:

- White: When you activate Auto Hold by pressing the AUTO HOLD switch.
- · Green: When you stop the vehicle completely by depressing the brake pedal with Auto Hold activated.
- Yellow: Whenever a malfunction with the Auto Hold is detected. If the AUTO HOLD indicator light remains yellow while driving, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Electronic Parking Brake (EPB)' section in chapter 6.

## (15) All Wheel Drive (AWD) warning light

#### if equipped

This indicator light illuminates:

Whenever there is a malfunction with the AWD system.

If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

For more information, refer to 'All Wheel Drive (AWD)' section in chapter 6.

For more information, refer to 'All Wheel Drive (AWD)' section in chapter 6 of the complete Owner's Manual.

## (16) ★ Forward Safety warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Yellow: When Forward Safety of Forward Collision-Avoidance Assist (FCA) is deselected, disabled, or a malfunction is detected.

If the yellow warning light remains on after the sensor has been uncovered or unblocked when the Forward Safety is set, have your vehicle inspected by an authorized HYUNDAI dealer.

This warning light blinks:

Red: When Forward Safety or Forward Cross-Traffic Safety function is operating.

For more information, refer to the 'Forward Collision-Avoidance Assist (FCA)' section in chapter 7.

## (17) 🕸 Emergency steering warning light

### if equipped

This warning light illuminates:

- · When the Start/Stop button is in the POWER ON position, the yellow warning light illuminates for about 3 seconds and then goes off.
- · Continuously Yellow: When Forward/Side Safety is deselected or FCA is disabled or a malfunction is detected.

If the yellow warning light is still on even after removing foreign material from the front of the sensors after Forward Safety select in settings, have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

This warning light blinks:

Red: When Forward/Side Safety of FCA is operating.

For more information, refer to the 'Forward Collision-Avoidance Assist (FCA)' section in chapter 7.

#### (18) ∤ Lane Safety indicator light

This indicator light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Gray: When Lane Keeping Assist (LKA) operating conditions are not satisfied.
- Green: When LKA operating conditions are satisfied.
- Yellow: When Lane Safety is disabled, or a malfunction is detected.

If the yellow warning light remains on after the sensor has been uncovered or unblocked when Lane Safety is set, have your vehicle inspected by an authorized HYUNDAI dealer.

This indicator light blinks:

Green: When LKA is operating.

For more information, refer to the 'Lane Keeping Assist (LKA)' section in chapter 7.

## (19) Lane Following Assist (LFA) indicator light

This indicator light illuminates:

- · Green: When LFA is operating.
- Gray: When LFA operating conditions are not satisfied.

This indicator light blinks:

White: When the steering wheel assist is canceled.

For more information, refer to the 'Lane Following Assist (LFA)' section in chapter 7.

## (20) ☐ Intelligent Speed Limit Assist (ISLA) indicator light

This indicator light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Yellow: When ISLA is disabled, the front view camera is blocked, or a malfunction is detected.

If the yellow indicator light remains on after the front view camera has been uncovered or unblocked, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Intelligent Speed Limit Assist (ISLA)' section in chapter 7.

### (21) 5 Inattentive driving warning light

This indicator light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- · Yellow: When Driver Attention Warning (DAW) is disabled or a malfunction is detected. If the yellow indicator light remains on after the front view camera has been uncovered or unblocked, have your vehicle inspected by an authorized HYUNDAI dealer.

This indicator light blinks:

Yellow: When the inattentive driving warning is operating.

For more information, refer to the 'Driver Attention Warning (DAW)' section in chapter 7.

### (22) Torward Attention Warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Red: When Forward Attention Warning is disabled or a malfunction is detected. If the red warning light remains on after the in-cabin camera has been uncovered or unblocked, have your vehicle be inspected by an authorized HYUNDAI dealer.

This warning light blinks:

Red: Forward Attention Warning warns the driver to keep eyes on the road.

For more information, refer to the 'ForwardAttentionWarning(FAW)' section in chapter 7.

## (23) ∧ Master warning light

This warning light illuminates:

When there is a malfunction in operation in any of the following systems:

- Forward Collision-Avoidance Assist (FCA) malfunction or radar blocked
- Blind-Spot Collision-Avoidance Assist (BCA) malfunction or radar blocked
- Exterior light malfunction
- Rear Cross-Traffic Collision-Avoidance Assist (RCCA) malfunction or radar blocked

- LED headlight malfunction
- · High Beam Assist (HBA) malfunction
- · Smart Cruise Control (SCC) malfunction or radar blocked
- · LFA malfunction
- · Door/Liftgate malfunction
- · Low washer fluid
- All Wheel Drive (AWD) malfunction (if equipped)
- Tire Pressure Monitoring System (TPMS) malfunction

If the issue is resolved, the Master warning light turns off.

## (24) t LED headlight warning light

This warning light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Whenever there is a malfunction with a LED headlight.
   If the LED headlight warning light remains illuminated while driving, have your vehicle inspected by an authorized HYUNDAI dealer.

This warning light blinks:

Whenever there is a malfunction with a LED headlight related part.

If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

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Driving with the LED headlight warning light on or blinking may reduce LED headlight life.

## (25) > Downhill Brake Control (DBC) indicator light

This indicator light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Green: When you activate the system by pressing the DBC button.
- Yellow: Whenever a malfunction with the DBC system is detected.
   If the yellow indicator light remains on, have your vehicle inspected by an authorized HYUNDAI dealer.

This indicator light blinks:

Green: When DBC system is operating.

For more information, refer to 'Downhill Brake Control (DBC)' section in chapter 6.

For more information, refer to 'Downhill Brake Control (DBC)' section in chapter 6 of the complete Owner's Manual.

## (26) 5 Electronic Stability Control (ESC) indicator light

This indicator light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- Whenever there is a malfunction with ESC system.

If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

This indicator light blinks:

While ESC is operating.

For more information, refer to 'Electronic Stability Control (ESC)' section in chapter 6.

### (27) & Electronic Stability Control (ESC) OFF indicator light

This indicator light illuminates:

- When the Start/Stop button is in the POWER ON position. It illuminates for about 3 seconds and then goes off.
- When you deactivate ESC system by pressing the ESC OFF button.

For more information, refer to 'Electronic Stability Control (ESC)' section in chapter 6.

## (28) - Immobilizer indicator light

This indicator light illuminates for up to 30 seconds:

When the vehicle detects the smart key in the vehicle with the Start/Stop button in the POWER ON or DRIVE READY position.

This indicator light blinks for a few seconds:

When the smart key is not in the vehicle, you cannot start the vehicle.

This indicator light illuminates for a few seconds and goes off:

If the smart key is in the vehicle and the Start/Stop button is in the POWER ON position. but the vehicle cannot detect the smart key.

Have your vehicle inspected by an authorized HYUNDAI dealer.

This indicator light blinks:

Whenever there is a malfunction with the immobilizer system.

Have your vehicle inspected by an authorized HYUNDAI dealer.

## (29) ← → Turn signal indicator light

This indicator light blinks:

When you operate the turn signal lever.

If the turn signal indicator light does not blink, blinks rapidly, or does not illuminate, have your vehicle inspected by an authorized HYUNDAI dealer.

## (30) ∌ € Light ON indicator light

This indicator light illuminates:

When the parking lights or headlights are on.

## (31) ■ High beam indicator light

This indicator light illuminates:

- When the headlights are on and the turn signal lever is moved to the high beam position.
- When the turn signal lever is pulled into the Flash-to-Pass position.

### (32) 記 High Beam Assist (HBA) indicator light

This indicator light illuminates:

When the high beam is on with the light switch in the AUTO position.

- White: When HBA is ready to operate.
- Green: When HBA is operating.

If your vehicle detects oncoming or preceding vehicles, HBA switches the high beam to low beam automatically.

For more information, refer to the 'High Beam Assist (HBA)' section in chapter 5.

### (33) & Door open indicator light

This indicator light illuminates:

When any door or the liftgate is left open.



#### 👠 WARNING

Before driving the vehicle, confirm the doors and liftgate are fully closed.

### (34) ∰ Icy road warning light

## tif equipped

This indicator light illuminates:

To warn the driver the road may be icy.

When the outside temperature on the temperature gauge is below 40 °F (4 °C), a single chime sounds, both the outside temperature gauge and lcy road warning indicator blink several times, and then they remain illuminated.

You can activate or deactivate the Icy road warning function from the Settings menu in the infotainment system. Select Setup > Cluster/Head-Up Display > Cluster > Content Selection > Icy Road Warning.



### CAUTION

If the lcy road warning light appears while driving, avoid speeding, rapid acceleration, sudden braking, or sharp turning.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

## (35) Power down indicator light

This indicator light illuminates:

- · When the high voltage battery level is too low or voltage is decreasing (Output limit occurs when the charge level is insufficient.).
- When the temperature of the high voltage battery is too high or too low.
- When the drive system temperature is overheated and requires protection. If it illuminates alone, it is not failure.
  - If both Power down indicator light and Service warning light illuminate at the same time, have your vehicle inspected by an authorized HYUNDAI dealer.
- · When the indicator is illuminated, driving speed may be limited and power will be reduced. Drive carefully.

## (36) to High voltage battery level warning light

This indicator light illuminates:

When the high voltage battery level is low.

Immediately charge the vehicle.

The vehicle can drive an additional 18-31 mi. (30-40 km).

• The actual distance to empty depends on the driving conditions.

### **Cluster Display Messages**



#### MARNING

- · Do not drive with a warning message displayed.
- If a warning message does not go off after taking measures, have your vehicle immediately inspected and repaired by an authorized HYUNDAI dealer.

#### Shift to P

This message appears if you try to turn off the vehicle without the gear in the P (Park) position.

If this occurs, the Start/Stop button turns to the POWER ON position.

## Low key battery

When the Start/Stop button is pressed to the OFF position, a message may appear, indicating the internal battery of the smart key is low. Replace the smart key battery.

## Press brake pedal to start vehicle

This message appears if the Start/Stop button is pressed repeatedly without depressing the brake pedal.

Start the vehicle by depressing the brake pedal and then pressing the Start/Stop button.

## Key not in vehicle

This message appears if the smart key is not in the vehicle when you have left the vehicle with the Start/Stop button in the POWER ON or DRIVE READY position.

Always turn off the vehicle before leaving your vehicle.

### Press START button again

If you cannot start the vehicle after the Start/Stop button is pressed, attempt to start the vehicle by pressing the Start/Stop button again.

If the warning message appears each time you press the Start/Stop button, have your vehicle inspected by an authorized HYUNDAI dealer.

### Place smart key in emergency start slot and press START button

This message appears if the smart key is not detected when you press the Start/Stop button after accessing with the smart key.

#### Check BRAKE SWITCH fuse

This message appears if the brake switch fuse is disconnected. Replace the fuse before starting the vehicle.

If that is not possible, start the vehicle by pressing the Start/Stop button for 10 seconds in the POWER ON position.

#### Shift to P or N to start vehicle

This message appears if you try to start the vehicle in any other position except P (Park) or N (Neutral). Start the vehicle with the vehicle in P (Park) with your foot depressing the brake pedal.

INFORMATION

You can start the vehicle with the gear in N (Neutral).

## Battery discharging due to external electrical devices

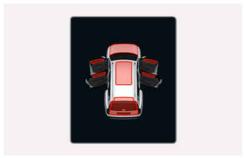
### tif equipped

This message appears if the vehicle battery voltage is low or if a current draw is detected that could drain the vehicle battery.

Do not connect any external electronic devices to the battery system or battery discharge may occur.

If this message appears on the cluster and there are no other external electronic devices connected to the vehicle, have your vehicle inspected by an authorized HYUNDAI dealer.

## Door, Hood, Liftgate open indicator



2C\_DoorOpenWarning

This warning appears if any door or hood or liftgate is left open. The warning indicates which door is open on the cluster display.

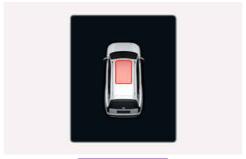


## **CAUTION**

Before driving the vehicle, confirm the door, hood, and liftgate are fully closed.

## Sunroof open indicator





2C\_SunroofOpenWarning

This warning appears if you turn off the vehicle when the sunroof is open. Close the sunroof securely before leaving your vehicle.

## Low tire pressure



2C\_TireLowPressureWarning

This warning message appears if the tire pressure is low. The corresponding tire on the vehicle is illuminated.

For more information, refer to the 'Tire Pressure Monitoring System (TPMS)' section in chapter 8.

## Lights

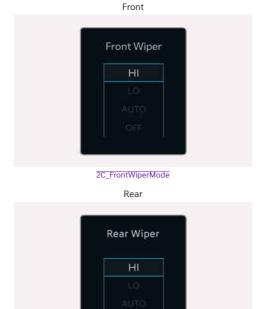


2C\_LightMode

This indicator displays which exterior light is selected using the lighting control.

You can activate or deactivate wiper/lights display function from the Settings menu in the infotainment system. Select Setup > Cluster/Head-Up Display > Cluster > Content Selection > Wiper/Lights Display.

## Wiper



2C\_RearWiperMode

This indicator displays which wiper speed is selected using the wiper control.

You can activate or deactivate wiper/lights display function from the Settings menu in the infotainment system. Select Setup > Cluster/Head-Up Display > Cluster > Content Selection > Wiper/Lights Display.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

#### Low washer fluid

This message appears if the washer fluid level in the reservoir is nearly empty. Have the washer fluid reservoir refilled

## Check turn signal

This message appears if the turn signal lights are not operating properly. Have your vehicle inspected by an authorized HYUNDAI dealer.

### Check headlight LED

This message appears if there is a problem with the LED headlight. Have your vehicle inspected by an authorized HYUNDAI dealer.

## Check Active Air Flap system

This warning message appears in the following situations:

• There is a malfunction with the air flap or controller.

Depending on external vehicle conditions, a warning message may be displayed even when the Active Air Flap is not malfunctioning.

Please check for freezing conditions, foreign objects, or any other obstructions on the flap.

### Authenticated. The vehicle can now be started

#### if equipped

This message is displayed for 4 seconds when you place your finger on the fingerprint sensor, and it is verified while the vehicle is off.

You can start the vehicle by depressing the brake pedal and then pressing the Start/ Stop button. However, the vehicle starts when the Start/ Stop button is pressed within 30 seconds after your fingerprint is verified and the immobilizer - indicator light is illuminated. If the immobilizer indicator light is off, your fingerprint must be verified again.

## Fingerprint authentication is locked out. Try again in XX min.

#### f equipped

This message is displayed for 4 seconds when fingerprint authentication has failed more than five times while the vehicle is off. While the message is displayed, fingerprint authentication does not work even if you place your finger on the fingerprint sensor, and the vehicle does not start even if the Start/Stop button is pressed.

Try again after the time indicated in the message has passed. However, you may start the vehicle with the smart key or digital key.

If fingerprint authentication still does not work, refer to the 'Limitations of Fingerprint Authentication System' section in the chapter 5.

## Place digital key on the wireless charger to keep the vehicle running

#### if equipped

If the vehicle is remotely started and **Start Vehicle** is deselected from the Settings menu in the infotainment system for **Driver 1** and **Driver 2**, this message will be displayed for up to 30 seconds when a door is opened after unlocking the doors with a digital key.

To drive your vehicle, place the registered digital key on the wireless charger, when this message appears.

## Scan an authorized fingerprint to keep the vehicle running

### f equipped

If the vehicle is remotely started and Start Vehicle is selected from the Settings menu in the infotainment system for **Driver 1** or **Driver 2**, this message will be displayed for up to 30 seconds when a door is opened after unlocking the doors with a digital key or the Blue Link app.

To drive your vehicle, have an authorized fingerprint verified on the fingerprint sensor when this message appears.

## Place digital key on the wireless charger or scan an authorized fingerprint

### tif equipped

If the vehicle is remotely started and Start Vehicle is selected from the Settings menu in the infotainment system for Driver 1 or Driver 2, this message will be displayed for up to 30 seconds when a door is opened after unlocking the doors with a digital key or the Blue Link app.

To drive your vehicle, place the registered digital key on the wireless charger, or have your fingerprint verified on the fingerprint sensor when this message appears.

## Vehicle is On (started by fingerprint)

## # if equipped

This message is displayed for up to 10 seconds if the driver's door is opened without the driver's seat belt fastened after turning on the vehicle with a fingerprint. After the message is displayed, a warning sounds when the door is closed.

Since the vehicle was started with a fingerprint, if the vehicle is turned off, and there is no smart key, digital key or a registered fingerprint in the vehicle, it may be difficult to start the vehicle again.

## Verify digital key or a fingerprint, then press the START button

### if equipped

This message is displayed for 6 seconds and the immobilizer 🖚 indicator light will blink for 10 seconds after the message 'Press START button with key' is displayed for 4 seconds if the smart key is not in the vehicle or not detected, the digital key is not placed on the wireless charger, or your fingerprint is not verified when you press the Start/Stop button.

To start the vehicle, place a registered digital key on the wireless charger or have an authorized fingerprint verified on the fingerprint sensor, and then press the Start/Stop button.

#### Biometric authentication active



This message is displayed for 4 seconds when the Start/Stop button is in the POWER ON or DRIVE READY position with the fingerprint registered, and **Start Vehicle** selected from the Settings menu in the infotainment system.

### Check user authentication system

### f equipped

This message is displayed if there is a problem with the digital key or fingerprint authentication system. Have the system inspected by an authorized retailer of HYUNDAI dealer.

### **Electric Vehicle Cluster Display Messages**

### Low EV charge

This message appears when the high voltage battery level reaches below 20 %.

The warning light on the instrument cluster turns on simultaneously.

Charge the vehicle immediately.

### Charge immediately. Power limited

This message appears when the high voltage battery level reaches below 10 %.

The marning light on the instrument cluster turns on simultaneously.

The vehicle's power may be reduced to protect the high voltage battery.

Charge the battery immediately.

## Check electric vehicle system

This message appears when there is a problem with the electric vehicle control system.

Do not drive when the warning message appears.

Have your vehicle inspected by an authorized HYUNDAI dealer.

#### Power limited

This warning message appears when the power of the vehicle is limited to ensure the safety of high-powered components for the reasons below:

- The high voltage battery level is too low or voltage is decreasing.
- The temperature of the high voltage battery is too high or too low.
- When the driving system is overheated and requires protection.

If it illuminates alone, it did not fail.

- Charge the vehicle is the charge level is low.
- If both Power down indicator light and Service warning light illuminate at the same time, have your vehicle inspected by an authorized HYUNDAI dealer.
- Do not accelerate or start the vehicle suddenly when the warning message appears.
- Be careful when the Power down indicator appears. The vehicle may not properly drive uphill and roll back on a slope.

### Low EV battery temperature. Power limited

If you start or turn off the vehicle when the outside temperature is low, this warning message appears to protect electric vehicle system.

If the high voltage battery charge level is low and parked outside for a long time, vehicle power could be limited due to the low battery temperature.

Charging the battery before driving helps increase power.

If this warning message still appears even after the ambient temperature has increased, have your vehicle inspected and repaired by an authorized HYUNDAI dealer.

### EV Battery Overheated! Stop vehicle

This warning message appears when the high voltage battery temperature is too high.

Stop the vehicle in a safe place and turn off the Start/Stop button and wait until the battery temperature decreases.

If this warning message still appears even after turning off the vehicle and waiting for a sufficient time, immediately have your vehicle inspected by an authorized HYUNDAI dealer.

## Stop vehicle and check power supply

This warning message appears when a failure occurs in the power supply system.

Immediately stop the vehicle in a safe place. Have your vehicle towed to an authorized HYUNDAI dealer for inspection and maintenance.

## Unplug vehicle to start

This message appears when you have started the vehicle with the charging connector plugged in.

Unplug the charging cable and start the vehicle.

## Charging door open

This message appears when you have started the vehicle with the charging door opened. Check if the charging door is completely closed after charging the vehicle.

## Charging Stopped. Check the AC (DC) charger

This warning message appears when charging is stopped for the reasons below:

- There is a problem with the external AC charger or DC charger.
- The external AC charger stopped charging.
- · The charging cable is damaged.

In this case, check whether there is any problem with the external AC or DC charger and charging cable.

If the same problem occurs when charging the vehicle with an AC charger that has been approved for proper operation or a genuine HYUNDAI portable charger, have your vehicle inspected by an authorized HYUNDAI dealer.

## Charging Stopped. Check the cable connection

This warning message appears when charging is stopped for the reasons below:

- The charging connector is not correctly connected to the charging inlet.
- The unlock button on the charging connector is pressed.

#### 126 Instrument Cluster

In this case, separate the charging connector and reconnect it and check whether there is any problem, such as external damage, foreign substances, etc., with the charging connector and charging inlet.

If the same problem occurs when charging the vehicle with a charger that has been approved for proper operation or a genuine HYUNDAI portable charger, have your vehicle inspected by an authorized HYUNDAI dealer.

## **Cluster Settings**

## INFORMATION \_

The information provided may differ depending on which functions are applicable to your vehicle.

## **Cluster Display Control**



Switch	Function	
们 (MODE)	Changing modes  Driving Assist Turn by Turn (TBT)  Utility	
<b>^</b> , <b>∨</b>	Changing items	
ОК	Setting or resetting the selected item	

## **Cluster Display View Modes**

# Driving Assist view



2C\_DrivingAssistMode

Displays the state of Lane Keeping Assist, Smart Cruise Control, Lane Following Assist and Highway Driving Assist (if equipped). For more information, refer to each system information in chapter 7.

## **INFORMATION**

#### **Driver assistance**



The current operation condition of Manual Speed Limit Assist, Smart Cruise Control, Lane Following Assist, etc. appears.

### TBT view



2C\_TurnByTurnMode

TBT navigation and distance/time to destination appear when TBT mode is selected.

### Utility view

#### **Current trip**



2C\_CurrentDrivingInfo

The trip computer mode displays information related to vehicle driving parameters including average energy consumption, tripmeter information, and vehicle speed.

#### **After Charging**



2C\_InfoAfterCharging

Trip distance, total driving time, average energy consumption, and instant energy consumption after the vehicle has been recharged are displayed.

To reset manually, press the **OK** button on the steering wheel for more than 1 second when 'After Charging' appears.

#### Since last reset



2C AccumulatedInfo

Accumulated trip distance, total driving time, and average energy economy are displayed. The information is accumulated starting from the last reset.

To reset manually, press the **OK** button on the steering wheel for more than 1 second when 'Since Last Reset' appears.

### Tire pressure



2C TireLowPressureInfo

The tire pressure of each tire appears.

For more information, refer to the 'Tire Pressure Monitoring System (TPMS)' section in chapter 8.

### **Drive power distribution**





Information related to AWD driving force appears.

For more information, refer to the 'All Wheel Drive (AWD)' section in the chapter 6.

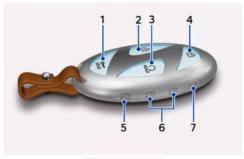
# 5. Convenience Features

This chapter explains how to use the user convenience features provided in the vehicle.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to vour vehicle.
- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference auide.

## **Smart Key**



2C SmartKeyOverview

- 1. Ranic
- 2. 🖻 Door unlock
- 3. Remote start
- 4. 🖰 Door lock
- 5. ₩ Hood open
- 6. #/# Remote Smart Parking Assist (Forward/Backward) (if equipped)
- 7. En Liftgate open/close

## www Using panic alarm

The horn sounds and the hazard warning lights blink for about 30 seconds if this button is pressed for more than 1 second. To stop the horn and lights, press any button on the smart key.

## 

Press the Door Unlock button on the smart key.

- · The chime sounds and hazard warning lights blink two times.
- The side view mirrors unfold if **On door unlock** or **On driver approach** is selected from the Settings menu in the infotainment system.

#### INFORMATION

After unlocking the doors, the doors are locked automatically after 30 seconds unless a door is opened.

#### Setting the Two Press Unlock feature

You can activate or deactivate the Two Press Unlock feature from the Settings menu in the infotainment system. Select **Setup** > **Vehicle** > **Door** > **2 Press Unlock**.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

#### Setting the door lock/unlock prevention feature

The doors may lock or unlock if the touch sensor of the outside door handle is recognized while washing your vehicle or due to heavy rain.

To prevent unintentional door lock or unlock, press the Door Lock button and Door Unlock button simultaneously for 4 seconds.

The hazard warning lights blink four times. At this time, the doors do not lock or unlock even though the touch sensor is touched on the outside door handle.

To deactivate the function, press the Door Lock or Unlock button on the smart key.

#### INFORMATION

During a car wash or rain, in order to minimize unintentional operation of the touch sensor, the touch sensor may become insensitive. This is not a malfunction.

## Remotely starting the vehicle

- 1. Press the Door Lock button on the smart key. You must be within about 32 ft. (10 m) from the vehicle.
- 2. Press and hold the Remote start button on your smart key within 4 seconds from when you have pressed the door lock button.
  - The vehicle must be in P (Park) for the remote start function to start.
- 3. The hazard warning lights blink and the vehicle starts.
- 4. To turn off the vehicle, press the Remote start button once.

#### **Non-operating conditions**

- The message 'Smart Key must be present to keep the vehicle running' appears if you
  get on the vehicle without a registered smart key.
- The vehicle turns off if you get inside the vehicle without a registered smart key.
- The vehicle turns off if you do not get on the vehicle within 10 minutes after remotely starting the vehicle.
- The Remote Start button may not operate if the smart key is not within 32 ft. (10 m) from the vehicle.
- The vehicle does not remotely start if the hood or liftgate is open.

## 

Close all doors, hood, and liftgate, and press the Door Lock button on the smart key.

- The chime sounds and hazard warning lights blink.
- The side view mirrors fold if **On door unlock** or **On driver approach** is selected from the Settings menu in the infotainment system.



#### WARNING

Do not leave the smart key in your vehicle with children that are unattended or

Children could unintentionally press the Start/Stop button or could operate the power windows or other vehicle controls or even cause the vehicle to move. This may result in serious injury or death.

#### NOTICE

Before you leave your vehicle with the smart key, verify that your vehicle is locked. When using the touch sensor on the front door handle, listen to hear that the lock has actuated, and then pull the handle within 3 seconds to confirm the doors are locked (If it has been longer than 3 seconds, verify the doors are locked by pressing the lock button on the smart key. You can hear a single beep.).

### € Hood open

Press the hood open button on the smart key.

For more information, refer to the 'Opening the Hood' section in chapter 5.

## 함/함 Remotely moving vehicle forward or backward

## tif equipped

With the smart key, the vehicle can be moved forward or backward remotely to enter or exit a tight parking space. For more information, refer to the 'Remote Smart Parking Assist 2 (RSPA 2)' section in chapter 7.

## @ Opening/Closing the liftgate

To open the liftgate:

Have the smart key with you. Press the liftgate open button on the vehicle or press and hold the Liftgate Open/Close button on the smart key for more than 1 second. The hazard warning lights blinks two times and the liftgate open.

To close the liftgate:

Press and hold the Liftgate Open/Close button on the smart key to close the opened liftgate. If you release the button while the liftgate is being closed, it stops working and the chime sounds for about 5 seconds.

The Liftgate Open/Close button only operates when the smart key is within 40 in. (1 m) from the liftgate.

## Starting the vehicle

Some models are equipped with a Start/Stop button instead of a key cylinder. For more information, refer to the 'Start/Stop button' section in chapter 6.

- · To prevent damaging the smart key:
  - Keep the smart key in a cool, dry place to avoid damage or malfunction. Exposure
    to moisture or high temperature may cause the internal circuit of the smart key to
    malfunction. This may not be covered under warranty.
  - Avoid dropping or throwing the smart key.
  - Protect the smart key from extreme temperatures.
- If the smart key is not moved for some time, the detection function for smart key operation will pause. Lift the smart key to activate the detection again.

## Mechanical key/Key cylinder (Driver door)

For more information, refer to the 'Using the Mechanical Key' section in this chapter.

### Loss of a smart key

A maximum of two smart keys can be registered to a single vehicle. If you happen to lose your smart key, immediately take the vehicle and remaining key to your authorized HYUNDAI dealer or tow the vehicle, if necessary.

### Smart key precautions

The smart key may not work if any of the following occur:

- The smart key is close to a radio transmitter such as radio station or airport that may interfere with normal operation of the transmitter.
- The smart key is near a mobile two way radio system or a mobile phone.
- Another vehicle's smart key is being operated close to your vehicle.
- The smart key is near any normal electronic devices or credit cards.
- · The vehicle battery is discharged.
- Connecting an external device to the power outlet and placing the smart key near the
  external device.
- If your windows are tinted, especially with metallic window tint, it may cause frequency interference, reducing the smart key operating range.



2C\_StartVehicleWithPushingSmartKey

If the smart key does not work correctly, open and close the door with the mechanical key. If the vehicle does not start due to a dead smart key battery or radio interference, place the smart key in the emergency start symbol position located in the center console open tray.

#### NOTICE

- Keep the smart key away from electromagnetic materials that may block electromagnetic waves to the key surface.
- If the smart key is in close proximity to your mobile phone, the signal could be blocked by your mobile phone's operational signals. This is specifically relevant when the phone is active such as making and receiving calls, text messaging, and/or sending/receiving emails. If possible, avoid keeping the smart key and your mobile phone in the same location such as pants or jacket pocket to avoid interference between the two devices.
- · Always have the smart key with you when leaving the vehicle. If the smart key is left near the vehicle, the vehicle battery may be discharged.

# Replacing the battery

Battery type: CR2450



- 1. Insert a slim tool into the slot and gently open the rear cover.
- 2. Remove the old battery and insert a new battery. Make sure the battery position is correct. An improperly positioned battery may discharge the battery, causing smart kev failure.
- 3. Reinstall the rear cover of the smart key.

If you suspect your smart key might have sustained some damage or you feel your smart key is not working correctly, contact an authorized HYUNDAI dealer.



# WARNING

This product contains a button battery. If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours. Keep batteries out of reach of children. If you think batteries may have been swallowed or placed inside any part of the body, seek immediate medical attention.

#### NOTICE



Always dispose batteries in accordance with local laws and regulations.

## **Immobilizer System**

The immobilizer system helps protect your vehicle from theft. If an improperly coded key (or other device) is used, the vehicle is disabled.

When the Start/Stop button is pressed to the POWER ON or DRIVE READY, the immobilizer system indicator should come on for a moment, then go off. If the indicator starts to blink, the system does not recognize the coding of the key.

Press the Start/Stop button to the POWER ON or DRIVE READY again.

The system may not recognize your key's coding if another immobilizer key or other metal object (for example, key chain) is near the key. The vehicle may not start because the metal may interrupt the transponder signal from transmitting normally. If the system repeatedly does not recognize the coding of the key, contact an authorized HYUNDAI dealer.

Do not attempt to modify this system or add other devices to it. Electrical problems may occur making your vehicle inoperable.



#### CAUTION

To prevent theft of your vehicle, do not leave spare keys anywhere in your vehicle. Your immobilizer password is a customer unique password and should be kept confidential.

#### NOTICE

Avoid exposing the key to moisture, static electricity, and rough handling. The immobilizer system may malfunction.

# **Hyundai Digital Key**

### f Equipped

Hyundai digital key provides convenience to the driver, which the driver can use to lock or unlock the driver and passenger doors or the liftgate and turn on the vehicle.



### MARNING

The vehicle can be started when the registered smartphone or card key is placed on the vehicle authentication pad (wireless charging pad). Therefore, do not leave unsupervised children or people who are not aware of the system since it can result in serious injury or death. In addition, always have the registered smartphone or card key with you to prevent vehicle theft when leaving the vehicle.

### Digital Key (Smartphone)

Hyundai digital keys are only available on smartphone that support digital key functions, and digital key functions of smartphones are provided by smartphone manufacturers.

#### INFORMATION

- Available smartphone brands and models can be found on smartphone manufactures' website or HYUNDAI website.
- · Certain functions may not operate depending on whether the service is provided in the vehicle.
- Depending on the availability of service on the vehicle, some functions may not operated.
- NFC communication may not work for some smartphones depending on the internal structure of the smartphone. Move the smartphone to the left or right of the indoor authentication pad (wireless charging pad) to operate.

# Setting your smartphone

To use the digital key (smartphone), download the Bluelink App and sign up Hyundai account and service. For more information about Bluelink, refer to the infotainment system guide.

# Registering your digital key (smartphone)

1. Turn on the vehicle with a smart key and have your smart key with you in the vehicle.

2. Put the gear in P (Park), select Setup > Vehicle > Digital Keys > Smartphone Key > My Smartphone Key from the infotainment system.



2C AVNRegisterSmartPhone

- 3. After selecting Digital Key > Set Up Digital Key from the Bluelink App in the smartphone, register the digital key according to the guidance in the smartphone screen.
  - Ultra Wide Band unsupported smartphone
    - Place your smartphone on the vehicle authentication pad (wireless charging pad) with the screen facing up.



- Ensure that the NFC Antenna position on the smartphone is in contact with the vehicle authentication pad (wireless charging pad).
- The location of the NFC Antenna on the smartphone may vary by phone model, so please contact the smartphone manufacturer for details.

#### INFORMATION

- The NFC Antenna position on Samsung device can be found in the following path: Setup > Connections > NFC and contactless payments.
- The NFC Antenna position on Google Pixel phone can be found in the following path: Setup > Connected devices > Device Connections > NFC.
- The NFC Antenna position on Apple iPhone is located at the top of the rear and Apple WATCH is located at the center of the screen.



2C SmartPhoneSample

- Ultra Wide Band supported smartphone
  - The digital key can be registered if the smartphone is inside the vehicle even without placing it on the vehicle authentication pad (wireless charging pad).
- Contact the smartphone manufacturer to check for Ultra Wide Band supported devices.
- 4. Press Save button in the infotainment system to start registration.

When the digital key (smartphone) is saved, a message appears on the infotainment system.

### During the digital key saving process, the process may cancel when:

- The smartphone is removed from the vehicle authentication pad (wireless charging pad)
- The infotainment system is changed
- The vehicle is turned off
- The gear is shifted

### If you want to register a different digital key (smartphone)

Delete the digital key (smartphone) before re-registering. For more information, refer to the 'Deleting your digital key (smartphone)' section in this chapter. An active Digital Key can be shared through the Bluelink App with a different smartphone.

#### INFORMATION

- The registering process does not start if a smart key is not in the vehicle.
- Ultra Wide Band is a radio technology that can use a very low energy level for shortrange, high-bandwidth communications over a large portion of the radio spectrum.

# Using the digital key (smartphone)

#### INFORMATION

- The Ultra Wide Band supported smartphone digital key can be used only when the smartphone and vehicle are connected with Bluetooth.
  - The necessary distance between the smartphone and vehicle for Bluetooth connection may vary depending on the surroundings.
  - Window tinting substances may cause poor Bluetooth connection.
  - If the smartphone is kept in the back pocket or bag, it may cause poor Bluetooth connection, or the door lock/unlock or vehicle start-up operation my be delayed.
- The Ultra Wide Band supported smartphone digital key can be used only for a certain amount of time to optimize the performance of the smartphone and vehicle battery. If you stay near the vehicle for several minutes with the Ultra Wide Band supported smartphone digital key, the Auto Unlock feature may not operate.
- Check the smartphone's setting menu or the App provided by the smartphone manufacturer for the connection of the vehicle and smartphone.
- The Ultra Wide Band supported smartphone digital key can also use the NFC function.
- The Remote Start, Panic or Front trunk open function may not be available depending on the country or vehicle type (hybrid, plug-in hybrid or electric vehicle).

### Digital key touch control

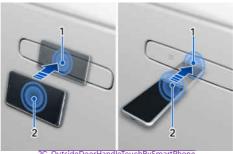
The driver can lock or unlock the door by placing the smartphone on the outside door handle, and the vehicle can be started by placing the smartphone on the vehicle authentication pad (wireless charging pad).

### Digital key close proximity control (Ultra Wide Band supported smartphone)

- If you have the smartphone in possession, the doors can be locked or unlocked without touching the smartphone to the door handle, but by touching the door lock/unlock sensor (engraved part) on the door handle. Also, the vehicle can be started by pressing the Start/Stop button without placing the smartphone on the vehicle authentication pad (wireless charging pad).
- · When the smartphone and vehicle is connected by Bluetooth, the Remote Start, Door Lock/Unlock, and Panic functions are available using the App provided by the smartphone manufacturer.

#### Locking/Unlocking the doors

• Ultra Wide Band unsupported smartphone



2C OutsideDoorHandleTouchBySmartPhone

- 1. Door handle authentication pad
- 2. NFC Antenna
- If the driver places the digital key (smartphone) NFC antenna to the driver's or passenger's door handle authentication pad for more than 2 seconds, the door locks or unlocks.
- If the Two Press Unlock feature is set, only the driver's door unlocks when the digital key (smartphone) is placed on the driver's door handle authentication pad. Place the digital key (smartphone) on the driver's door handle authentication pad once more within 4 seconds to unlock all doors.
- Ultra Wide Band supported smartphone
  - If you touch the door lock/unlock sensor (engraved part) on the door handle with the smartphone in possession, the door locks or unlocks.

After unlocking the doors, the doors are automatically re-locked after 30 seconds unless a door is opened.

If the smartphone digital key does not operate, try again after moving the smartphone away from the door handle authentication pad (more than 4 in. (0.1 m)).

#### You cannot lock your vehicle using the digital key (smartphone) if any of the following occurs:

- The smart key is in the vehicle.
- The Start/Stop button is in the POWER ON or DRIVE READY position.
- Any of the doors, hood, or liftgate are open.
- The door may not unlock automatically if you stay near the vehicle for several minutes with the Ultra Wide Band supported smartphone in possession.
- If the smartphone is kept in the back pocket or bag, it may cause poor Bluetooth connection, or the door lock/unlock or vehicle start-up operation my be delayed.

### **Starting the vehicle**

- Ultra Wide Band unsupported smartphone
  - After placing your registered digital key (smartphone) on the vehicle authentication pad (wireless charging pad), depress the brake pedal and press the Start/Stop button.
  - After starting the vehicle, the digital key (smartphone) may be removed from the vehicle authentication pad (wireless charging pad).

- Ultra Wide Band supported smartphone
  - With the smartphone inside the vehicle, depress the brake pedal and press the Start/ Stop button.
  - To start the vehicle remotely, use the App provided by the smartphone manufacturer to lock the vehicle with the Door Lock button, and press the Remote Start button within 4 seconds.

The vehicle starts and the hazard warning lights blink.

- Press the Remote Start button again to turn off the vehicle.

For more information on the basic way to start the vehicle, refer to the 'Start/Stop button' section in chapter 6.

#### INFORMATION

If a shared digital key (smartphone) is used for the first time, the activating time may take longer.

- Place the shared digital key (smartphone) on the door handle authentication pad until the vehicle door lock/unlock activates.
- If a shared digital key (smartphone) is first used on the vehicle authentication pad (wireless charger pad), the initial start of the vehicle may fail.
- If the door lock/unlock is activated once with the shared digital key (smartphone) or the vehicle is started with the digital key (smartphone) on the vehicle authentication pad, the digital key (smartphone) is registered in the vehicle.

## **Operating the liftgate (Ultra Wide Band supported smartphone)**

- If the vehicle is locked, press the Liftgate Open button with the smartphone in possession to open the liftgate.
- If you are in the detecting area behind the liftgate for more than 3 seconds with the smartphone in possession when **Smart Liftgate** is set, the liftgate opens automatically.

# Deleting your digital key (smartphone)

- 1. Turn on the vehicle with a smart key. Have your smart key with you in the vehicle.
- 2. To delete all the registered digital key (smartphone), select Setup > Vehicle > Digital Kevs > Smartphone kev > Delete All from the infotainment system.



2C\_AVNDeleteDigitalKey

To delete only my registered digital key (smartphone), select **Setup > Vehicle > Digital** Keys > Smartphone key > My Smartphone Key > Delete from the infotainment system.



2C AVNDeleteMvSmartPhone

- If a shared digital key (smartphone) is registered, it cannot be deleted.
- A new smartphone can be registered after deleting the existing digital key (smartphone) from My Smartphone Key menu.

### INFORMATION

- If the registered digital key (smartphone) is deleted, the digital key saved in the smartphone is also deleted.
- If the digital key is deleted from the smartphone, the digital key (smartphone) registered in the vehicle is also deleted.
- The shared digital key registered in the vehicle cannot be deleted individually.
- Even though the Blue Link® App is deleted from the smartphone, the digital key saved in the smartphone is not deleted.
- Management of the digital key saved in the smartphone is available from the Digital Key App provided by the smartphone manufacturer.

# Digital Key (card key)

# Registering your digital key (card key)

- 1. Have both of your smart keys with you in the vehicle.
- 2. Select Setup > Vehicle > Digital Keys > NFC Card Key, and check whether Use is selected in the infotainment system.



2C AVNRegisterCardKey

3. Place your card key on the vehicle authentication pad (wireless charging pad) while the vehicle is on.



2C\_WirelessChargingPad

- Register your card key by selecting Vehicle > Digital Keys > NFC Card Key > Save from the Settings menu in the infotainment system.
  - Only one digital key (card key) can be registered to the vehicle. If it must be replaced, delete the existing card key before registering the new card key.
  - To register a digital key (card key), both of your smart keys must be in the vehicle.
  - Once a digital key (card key) is registered, it cannot be registered in another vehicle. It is possible to re-register it to the original vehicle.

## Using the digital key (card key)

### Locking/Unlocking the doors

If the driver places the digital key (card key) to the driver's or passenger's door handle authentication pad for more than 2 seconds, the door locks or unlocks.

If the **Two Press Unlock** feature is set, only the driver's door unlocks when the digital key (card key) is placed on the driver's door handle authentication pad. Hold the digital key (card key) near the driver's door handle authentication pad once more within 4 seconds to unlock all doors.

After unlocking the doors, the doors are automatically re-locked after 30 seconds unless a door is opened.

#### INFORMATION

You cannot lock your vehicle using the digital key (card key) if any of the following occurs:

- The smart key is in the vehicle.
- The Start/Stop button is in the POWER ON or DRIVE READY position.
- Any of the doors, hood, or liftgate are open.

### **Starting the vehicle**

After placing your registered digital key (card key) on the vehicle authentication pad (wireless charging pad), depress the brake pedal and press the Start/Stop button. For more information on the basic way to start the vehicle, refer to the 'Start/Stop button' section in chapter 6.

#### NOTICE

- The digital key (card key) may not work under the following conditions:
  - The digital key (card key) is not placed on the door handle authentication pad or vehicle authentication pad (wireless charging pad) correctly.
  - The digital key (card key) is near NFC-enabled cards such as credit cards or smartphones.
    - If the digital key (card key) does not work, try again after moving the digital key (card key) away from the door handle authentication pad (more than 4 in. (0.1 m)).
- The digital key (card key) can be damaged by impacts. If the digital key (card key) is damaged, replace the digital key (card key) with a new one and register it again.
- Long-time exposure to high temperature may cause the digital key (card key) to malfunction. Be careful not to expose the digital key (card key) to direct sunlight or high temperature.
- Leaving the digital key (card key) on the in-vehicle authentication pad (wireless charging pad) while driving may cause the digital key (card key) to malfunction. Remove the digital key (card key) from the in-vehicle authentication pad (wireless charging pad) after starting the vehicle.
- Keep the digital key (card key) away from the smartphone when charging the smartphone. If the digital key (card key) is placed between the smartphone and the in-vehicle authentication pad (wireless charging pad) while the smartphone is being charged, the digital key (card key) may malfunction. For example, when charging smartphone while the digital key (card key) is attached to the back of the smartphone case.

## Deleting your digital key (card key)

- 1. Turn on the vehicle with a smart key. Have your smart key with you in the vehicle.
- 2. Select Setup > Vehicle > Digital Keys > NFC Card Key > Delete from the infotainment system.



2C AVNDeleteCardKev

# Personalized Profile and Vehicle Settings

You can set the personalized profile (includes items such as vehicle settings and audio preferences) for Driver 1 and Driver 2 with the registered digital key (smartphone) profiles.

# Linking user profile

- 1. Select Setup > User Profile > Link Digital Key (Smartphone) from Settings menu in the infotainment system.
- 2. Select Link to connect the registered smartphone's digital key and the user's profile.
- 3. Follow the instructions according to the message on the infotainment system.

## Unlinking user profile

Select Setup > User Profile > Profile Settings, and then deselect Link Digital Key (Smartphone) from Settings menu in the infotainment system.

#### INFORMATION

- User profile cannot be linked to both Driver 1 and Driver 2 that are connected to single smartphone. Personalization operates with the recently linked user profile, and the previously linked user profile will be automatically canceled.
- User profile link works only when the digital key is registered to the vehicle.
- Digital key (card key) cannot be linked with a user profile.
- · If the user profile linked digital key in the smartphone is deleted, the digital key should be re-registered and personalized by linking the user profile again.

### Vehicle personalization operation

- The personalization function linked with digital key works when the profile linked smartphone is placed on the outside door handle authentication pad to lock or unlock the doors.
- The profile set by the digital key can be changed manually from the infotainment system.
- · The personalization function using the digital key can be operated after linking the digital key in the infotainment system profile menu.
- The personalization function works only when the vehicle is OFF or when the vehicle is started remotely. If the vehicle is not started remotely, the personalization function does not work with the digital key.

### User profile operation according to door lock/unlock system is as follows:

<u>Item</u>	Personalization Operation		
Initial value	Guest		
Profile linked smartphone key	Linked profile		
Profile unlinked smartphone key			
NFC card key	Recently activated profile		
Smart key			

## **Used Vehicle/Digital Key Maintenance**

# Purchasing used vehicle

If any of the digital key devices (smartphone key, card key) are registered in the vehicle, the 'Digital key registered' message appears once on the infotainment system when the Start/Stop button is in the POWER ON position after unlocking the doors. When purchasing a used vehicle, make sure to check the message and delete the smartphone key and card key registered by the previous user and inform the purchase of a used vehicle through Hyundai Customer Care Center.

If the card key comes with the vehicle, check whether it operates properly.

# Digital Key maintenance

If you need to have your Digital Key System repaired or replaced, the registered smartphone key or card key can be deleted.

### **Limitations of the System**

- HYUNDAI Digital Key may not operate if any of the following occurs:
  - Smartphone battery or the vehicle battery is discharged.
  - NFC or Bluetooth is turned off on the smartphone settings.
  - A credit card is near your smartphone, or a metal or thick smartphone case is used.
  - The card key is in a wallet or card holder, or overlapped with other cards.
  - There is electronic interference by other vehicles, objects, etc.
  - If you use a smartphone cover that uses wireless communication or is made of metal, remove the smartphone cover.
- The vehicle may not be controlled by the smartphone if any of the following occurs:
  - Other smartphone functions (calls, urgent calls, audio or NFC payment), apps, or wireless earphones are operating.
  - The Bluelink App function such as basic setting or app launching is limited by the prior policy according to the manufacturer.

# **Fingerprint Authentication System**

## # If Equipped

Fingerprint authentication system provides convenient features such as allowing the driver to start the vehicle without a smart key, making electronic payments without a password, etc., with a registered fingerprint.

A fingerprint must be registered in the **User Profile** settings from the infotainment system to use the system.

The maximum of two fingerprints can be registered. Driver 1 and Driver 2 can register one fingerprint each.

## **Fingerprint Authentication System Settings**

You can set or delete a fingerprint through the infotainment system.

## Registering fingerprint



2C FingerprintAuthenticationSensor

- 1. Turn on the vehicle with a smart key. Have both of your smart keys with you in the vehicle.
- 2. Select Setup > User Profile > Driver 1 (or Driver 2) > Fingerprint Identification > Set/ **Delete Fingerprint** > **Set** in the infotainment system.
- 3. Follow the instructions to place your finger and several parts of your fingerprint on the fingerprint sensor until the scanning process is complete. Once the 'Saving **fingerprint....**' appears, the fingerprint registering process is proceeded.
- 4. When the fingerprint registering process is completed in the vehicle, the status is displayed on the infotainment system.

#### INFORMATION

- Remove all substances including protection film on the fingerprint sensor, and then register your fingerprint.
- · Starting the vehicle with fingerprint is available when your vehicle is equipped with the Digital Key system.
- Electronic payment with fingerprint is available when you are a member of Blue Link.
- The fingerprint registering process is canceled when the following condition occurs:
  - The infotainment system screen is altered
  - The Start/Stop button turns on or off
  - The gear is shifted, and the vehicle is driven

### Deleting fingerprint

- 1. Turn on the vehicle with a smart key.
- 2. Select Setup > User Profile > Driver 1 (or Driver 2) > Fingerprint Identification > Set/ **Delete Fingerprint > Delete** in the infotainment system.
- 3. Delete the registered fingerprint according to the message 'Delete all Driver 1 (or Driver 2) fingerprints?'.
- 4. Once the fingerprint is deleted, the status is displayed on the infotainment system.



### CAUTION

Do not participate in duplicating fingerprints with anyone.

#### NOTICE

Touch the fingerprint sensor gently. Fingerprint authentication attempts with excessive force may fail.

#### INFORMATION

To delete your fingerprint, at least one smart key must be in the vehicle.

# **Fingerprint Authentication System Operation**

# Using features with touch control

When the fingerprint shape appears on the infotainment system screen, you should place your finger on the fingerprint sensor in the vehicle according to the instruction message for authorization and then you can operate the linked features without entering the password.

If the fingerprint authentication system does not work, pull your finger away from the fingerprint authentication sensor and then try again.

Fingerprint linked features can be turned on or off from the Settings menu. Select Setup > User Profile > Driver 1 (or Driver 2) > Fingerprint Identification.

Fingerprint linked features	Characteristic	
Starting vehicle	Start vehicle with fingerprint but without smart key	
Personal information access	Use features with fingerprint but without a password	
Profile unlock		
Valet mode exit		
Hyundai Pay (Electronic payment)		

See additional information in supplied Infotainment Manual to link profile, to set valet mode, or to use Hyundai Pay.

# INFORMATION

You cannot link a profile with the same fingerprint for Driver 1 and Driver 2. The personalization function works with the recently linked profile, and the previously linked profile automatically cancels.

# Starting the vehicle



2C\_FingerprintAuthenticationSensorWithStartButton

Place your finger on the fingerprint sensor to verify your fingerprint. After it is successfully verified, start the vehicle by pressing the Start/Stop button within 30 seconds.

Message on cluster when starting the vehicle

Fingerprint authentication status	Light color	Message on cluster display	
Standby	White	-	
Succeed	Blue	'Authenticated. The vehicle can now be started.'	
Fail	Yellow	-	

Fingerprint authentication status	Light color	Message on cluster display	
Restricted due to consecutive failure	Red	<ul> <li>'Fingerprint authorization is locked out.</li> <li>Try again in 00 min.'</li> <li>Restricted for 1 minute, 3 minutes or 5 minutes when failed every 5 times.</li> </ul>	

For more information on how to start your vehicle with the Start/Stop button, refer to the 'Start/Stop button' section in chapter 6.

### INFORMATION

If you are in the vehicle for an extended period without starting the vehicle, the fingerprint sensor may turn off. If this occurs, depress the brake pedal and verify your fingerprint again when the fingerprint sensor illuminates.

## **Limitations of Fingerprint Authentication System**

- Fingerprint authentication system may not work when:
  - Trying to authorize with an unregistered fingerprint.
  - The center of the fingerprint sensor is not touched.
  - Any water or substance is on your finger or the sensor.
  - The film on the sensor is not removed.
  - The registered fingerprint is scarred or swollen.
  - The hand is overly dry.
  - The sensor is touched shortly.
- If fingerprint authentication fails repeatedly, fingerprint authentication may be temporarily restricted. You should try it later or try other methods such as using your smart key or inputting your password.
- If the vehicle does not start due to fingerprint sensor malfunction, have the system inspected by an authorized HYUNDAI dealer.
- When you visit an authorized HYUNDAI dealer to repair parts due to fingerprint authentication system or related part failure, your registered fingerprint might be deleted. Have your smart key when you visit an authorized HYUNDAI dealer.
- You cannot use the fingerprint sensor when the vehicle is discharged.
- If Start Vehicle is deselected from the vehicle settings menu for Driver 1 and Driver 2, the fingerprint sensor will not operate when the vehicle is off.
- If the vehicle is turned on or off during the fingerprint authentication process, your fingerprint may not be verified properly.



### MARNING.

Do not register children's fingerprints in the vehicle. If you register children's fingerprints and leave them in the vehicle, unexpected crashes may occur.

## When Purchasing a Used Vehicle

If you purchase a used vehicle, you should confirm and delete all registered fingerprints in Driver 1 and Driver 2 profile.

If a fingerprint is registered, the message 'Biometric authentication active' appears on the cluster display once when the vehicle door is unlocked, and the vehicle is started.

## Remotely Starting the Vehicle

If Start Vehicle is selected from the Driver 1 or Driver 2 User Profile settings menu, and the door is unlocked with the Digital Key App or the Blue Link App while the vehicle is remotely started, the vehicle will turn off if the fingerprint sensor does not verify your fingerprint.

To remotely start the vehicle with the Digital Key App, refer to the 'Hyundai Digital Key' section in this chapter. And for Blue Link App, see additional information in separately supplied manual.

To remotely start the vehicle with the Digital Key App, refer to the 'Hyundai Digital Key' section in chapter 5 of the complete Owner's Manual. And for Blue Link App, see additional information in separately supplied manual.

# **Door Locks**

# **Operating Door Locks from Outside the Vehicle**

### Using the smart key

To lock or unlock the doors from outside the vehicle with the smart key button, refer to the 'Smart Key' section in this chapter.

When 'On driver approach' is set



Approach within 1 m (40 in.) to the front outside door handle while carrying the smart key.

- Outside door handles of all doors pop out.
- The hazard warning lights blink two times and all doors unlock.

When 'On driver approach' is not set



Touch the front door lock/unlock sensor (engraved part) on the driver's outside door handle.

- Outside door handles of all doors pop out.
- The hazard warning lights blink two times and all doors unlock.

Setting door lock/unlock features

The function can be activated or deactivated from the Settings menu in the infotainment system. Select:

Setup > Vehicle > Door > On driver approach

#### NOTICE

- If you lock the door with the touch sensor, the doors cannot be unlocked with the touch sensor within 3 seconds.
- If you lock the doors using the door touch sensor, the doors are not locked under the following circumstances:
  - The Smart Key is in the vehicle.
  - The Start/Stop button is in the DRIVE READY or POWER ON position.
  - Any door is open (except for the liftgate).

If this occurs, a chime sounds for a few seconds. Check the vehicle before attempting to lock the vehicle again.

# Unlocking the door

Have the smart key with you and grab the door handle to activate the door unlock touch sensor (if equipped) or press the door handle button.

The chime sounds and hazard warning lights blink two times.

#### INFORMATION

- The door touch sensor only operates when the smart key is within 40 in. (1 m) from the outside door handle.
- In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.
- If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit and prevent damage to system components.
- During a car wash or rain, in order to minimize unintentional operation of the touch sensor, the touch sensor may become insensitive. This is not a malfunction.
- The doors may not lock or unlock in the following situations.
  - If the touch sensor is touched with gloves on
  - If the door is suddenly approached

# Operating Door Locks from Inside the Vehicle



### MARNING .

- · Always close and lock the doors while the vehicle is moving. If the doors are unlocked, the risk of being thrown from the vehicle in a collision increases.
- Do not pull the inner door handle of the driver's or passenger's door while the vehicle is moving.
- Do not leave the elderly, children, or animals unattended in your vehicle. An enclosed vehicle can become extremely hot and the elderly, unattended children or animals who cannot escape the vehicle may be seriously injured or killed.
- Always park your vehicle properly. Depress the brake pedal, change the gear to P (Park), apply the parking brake, press the Start/Stop button to the OFF position, close all windows, lock all doors, and always take the keys with you.
- Be careful when opening doors and watch for vehicles, motorcycles, bicycles, or pedestrians approaching the vehicle to prevent serious injury or death.

### With the door inside handle



#### Driver door

If the inner door handle is pulled when the door is locked, the door is unlocked and opened.

#### Passenger door and Rear door

If the inner door handle is pulled once when the door is locked, the door is unlocked. If the inner door handle is pulled once more, the door is opened.

### With the central door lock/unlock switch



2C CentralDoorLockButton



2C\_CentralDoorLockButton\_1

The central door lock/unlock switch is located on the driver's door, and front passenger's door.

When pressing the  $\bigcirc$  portion on the switch, all vehicle doors are locked.

 If any door is opened, the doors are not locked even though the lock switch of the door is pressed.

When pressing the  $\bigcirc$  portion on the switch, all vehicle doors are unlocked.

#### NOTICE

To exit the vehicle if the power door lock does not function:

- Operate the door unlock feature repeatedly (both electronic and manual) while simultaneously pulling on the door handle.
- Operate the other door locks and handles.
- Lower the driver's front window and use the mechanical key to unlock the door from outside.

### **Using the Mechanical Key**

If the smart key does not operate normally, you can lock or unlock the driver's door by using the mechanical key.

## Unlocking with the mechanical key

1. Pull the door handle while pressing the front part of the outside door handle (front side of the vehicle). Then remove the cover under the rear part of the door handle.



2C\_UsingEmerengcyKey

2. Insert the mechanical key into the key cylinder, and turn the key clockwise to unlock the vehicle (direction 1) or counterclockwise to lock the vehicle (direction 2). Once the doors are unlocked, pull the door handle.



3. After using the mechanical key, turn the key knob and insert the key protector.

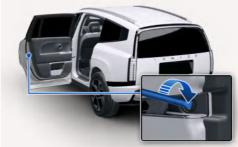
#### NOTICE

- · When removing the key cylinder cover, avoid scratching or breaking the plastic material.
- If the key cylinder cover freezes and cannot be removed easily, lightly tap on the cover or try to warm the cover by placing your hands around it and blowing warm air on it.
- Do not apply excessive force to the door and door handle.

<b>INFORMATION</b>		

Only the driver's door can be locked/unlocked using the mechanical key.

## In case of an emergency



2C\_HowToLockDoorInEmergency

In case of emergency such as when the battery is discharged, the only way to lock the door(s) is with the mechanical key from the outside key hole.

Doors without an outside key hole can be locked as follows:

- 1. Open the door.
- 2. Insert a small blade tool (for example, screwdriver or similar) into the emergency door lock hole and turn it clockwise for left side door, or turn it counterclockwise for right side door.
- 3. Close the door securely.

#### INFORMATION

If the electrical power to door lock switch does not operate (for example, discharged vehicle battery) and the liftgate is closed, you cannot open the liftgate until power is restored.

#### Auto Door Lock/Unlock Features

# Impact sensing door unlock system

All doors are automatically unlocked when an impact causes the airbags to deploy while the Start/Stop button is in the POWER ON or DRIVE READY position.

# Auto Lock Enable on speed

All the doors are automatically locked when the vehicle exceeds 9 mph (15 km/h).

# Auto Lock Enable on speed of shift

All the doors are automatically locked when the vehicle exceeds 9 mph (15 km/h) or when the vehicle is shifted out of P (Park) while the vehicle is running.

## **Electronic Child Safety Lock**



When the electronic child safety lock button is pressed and the indicator light on the button illuminates, the rear doors cannot be opened from inside the vehicle.

- The rear door window cannot be opened or closed while the electronic child safety lock button is in the LOCK position (indicator light ON). For more information, refer to the 'Windows' section in this chapter.
- Electronic child safety lock does not automatically turn on unless the driver presses the electronic child safety lock button.
- If 3 minutes passes after the Start/Stop button is pressed to the OFF position, the indicator on the button turns off, and the driver cannot turn off electronic child safety lock by pressing the button. To turn off the function, press the Start/Stop button to the POWER ON or DRIVE READY position, and then press the electronic child safety lock button.
- If the power is supplied again after removing the battery or battery is discharged while the electronic child safety lock button is in the LOCK position, press the button once more to match the state of the indicator on the electronic child safety lock button and actual status of the electronic child safety lock function.
- If the airbag is activated while the electronic child safety lock button is in the LOCK position (indicator light ON), the rear doors will unlock automatically.
- Vehicles equipped with the electronic child safety lock feature is not provided with a manual child safety lock.



### WARNING

If children accidentally opens the rear door while the vehicle is in motion, they could fall out of the vehicle. Electronic child safety lock should always be used whenever children are in the vehicle.

#### NOTICE

## Child safety lock failure

When electronic child safety lock does not work even though the button is pressed, the message 'Child safety lock failure' appears and an alarm sounds. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

# Safe Exit Assist (with electronic child safety lock)

Safe Exit Assist prevents the rear occupant from opening the rear door. When an approaching vehicle from the rear area is detected after the vehicle stops, the rear doors will not unlock even when the driver tries to unlock the rear doors using the electronic child safety lock button. For more information, refer to the 'Safe Exit Assist (SEA)' section in chapter 7.

# **Theft-Alarm System**

This system helps protect your vehicle and valuables. The horn sounds and the hazard warning lights blinks continuously if any of the following occur:

- A door is opened without using the smart key.
- The liftgate is opened without using the smart key.
- The hood is opened.

The alarm continues for 30 seconds, then the system resets. To turn off the alarm, unlock the doors with the smart key.

The Theft Alarm System automatically sets 30 seconds after you lock the doors and the liftgate. For the system to activate, you must lock the doors and the liftgate from outside the vehicle by doing one of the following:

- · Using the smart key.
- · Touching the touch sensor on the outside door handle with the smart key in your possession. (available with touch sensor type)

The hazard warning lights blink and the chime sounds once to indicate the system is armed.

Once the security system is set, opening any door, liftgate, or hood without using the smart key causes the alarm to activate.

The Theft Alarm System is not set if the hood, liftgate, or door is not fully closed. If the system is not set, check the hood, liftgate, or doors are fully closed.

Do not attempt to modify this system or add other devices to it.

### INFORMATION

- · Do not lock the doors until all passengers have left the vehicle. If a door is opened after the system is armed, the alarm is activated.
- If the vehicle is not disarmed with the smart key, open the doors using the mechanical key and start the vehicle by pressing the Start/Stop button with the smart key.
- If the system is disarmed by unlocking the vehicle, and a door or the liftgate is not opened within 30 seconds, the doors are relocked and the system is rearmed automatically.

# Advanced Rear Occupant Alert (ROA)

Advanced ROA is provided to help prevent a driver from leaving a vehicle with a passenger left in the vehicle.

The system is designed to help detect an infant and child's presence.

## **Advanced Rear Occupant Alert Settings**

To use ROA, it can be enabled from the Settings menu in the infotainment system. Select Setup > Vehicle > Convenience > Rear Occupant Alert.

Deselect Rear Occupant Alert from the settings menu to turn the system off.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

### **Advanced Rear Occupant Alert Operation**

First alert

When you turn off the vehicle and open the driver's door after opening and closing the rear door or liftgate, the 'Check Rear Seats' warning message appears on the cluster display.

· Second alert

After the first alert, the second alert operates when it detects an infant or child's presence after the driver's door is closed and all the doors are locked.

The horn will sound for about 25 seconds. If the system continues to detect a movement, the alert operates up to 8 times.

Unlock the doors with the smart key to stop the alert. The system detects movement in the vehicle for 10 minutes after the door is locked.

To prevent the second alert from activating, press the **OK** button on the steering wheel when the first alert appears on the cluster.



#### Steering wheel



2C\_SteeringWheelOkButton

### INFORMATION

- The second alert is available for vehicles equipped with the ROA sensor and is activated only after the first alert is activated.
- · If the vehicle is started remotely (if equipped with Remote Start), inside movement detection will stop.

## **Advanced Rear Occupant Alert Precautions**

- · Make sure that all the windows are closed. If the window is open, the alert may operate by the sensor detecting an unintended movement (for example, wind or bugs).
- The system is intended to detect the movement of infants sitting in the rear seats. But a movement detected in the driver or passenger seats may cause a false alert.
- If the rear door is opened, and an infant or child is in the rear seat, then the alert may operate after the vehicle is locked.
- An alert can occur if there is an impactor strong movement on the vehicle.
- If boxes or objects are stacked in the vehicle, the system may not detect passengers.
- The alert may operate if the vehicle is pushed, shaken, being washed, or in an environment with noise/vibration after the vehicle is locked.
- The alert may operate when there are metallic or liquid objects in the vehicle.



Even if your vehicle is equipped with Advanced ROA, always make sure to check the rear seats before you leave the vehicle.

Advanced ROA may not operate when:

- Movement does not continue for a certain period of time.
- · A child is not seated in a child restraint system.
- The detection may be weak if the signal is obstructed by the vehicle seat or Child Restraining System (for example, child is restrained in the forward facing position).
- The rear passenger is a child over 6 years.
- The rear passenger is covered with a fabric containing metallic substance such as a blanket.
- An object in the vehicle blocks the sensor.
- The sensor is contaminated by foreign material.
- An animal at the rear seat is not large enough to be detected by the sensor or there is hardly any movement.
- Attaching objects or modifying the interior ceiling, or the interior ceiling is deformed or damaged.
- There are electronic interference around the vehicle.
- Other environmental reasons that may affect the system.

# **Declaration of Conformity**

The radio frequency components (ROA Radar Sensor) complies:

For USA



· For Canada



# Integrated Memory System (IMS)

## f Equipped



2C SeatMemoryButton

IMS for the driver's seat is provided to store and recall the following memory settings with a simple button operation.

- · Driver's seat position
- Side view mirror position (if equipped)
- Steering wheel position (if equipped)
- Head-Up Display (HUD) position (if equipped)

If the IMS does not operate normally, contact an authorized HYUNDAI dealer.



#### MARNING

Never attempt to operate the IMS while the vehicle is moving.

#### INFORMATION

If the battery is disconnected, the memory settings are erased.

# **Storing Memory Positions**

- 1. Make sure the Start/Stop button is in the POWER ON or DRIVE READY position and the gear is in P (Park).
- 2. Adjust the driver's seat and side view mirror to the desired position.
- 3. Press and hold one of the memory buttons (1 or 2). The system beeps once when successfully stored.
- 4. 'Driver 1 (or 2) settings saved' appears on the infotainment system.

# **Recalling Memory Positions**

- 1. Make sure the Start/Stop button is in the POWER ON or DRIVE READY position and the gear is in P (Park).
- 2. Press the desired memory button (1 or 2). The system beeps once and then the driver's seat position and side view mirror position are automatically adjusted to the stored positions.
- 3. 'Driver 1 (or 2) settings applied' appears on the infotainment system.

#### **INFORMATION**

- To recall the IMS settings of memory button 2 while the settings of memory button 1 is being recalled, press memory button 1 to stop the IMS adjustment, and then press memory button 2.
- If you adjust the driver seat and the side view mirror while the IMS is adjusting the seat and the side view mirror, the system stops the adjustments.

## **Resetting the Integrated Memory System**

- 1. Make sure the Start/Stop button is in the POWER ON or DRIVE READY position and the gear is in P (Park).
- 2. Adjust the driver's seat and seatback to the most forward position.
- 3. Press and hold both the memory button 1 or 2 and the driver's seat forward movement switch.

# While resetting IMS

A notification sound is heard and the seat is adjusted to the most reward position. Then the seat and seatback move to the default center position.

The resetting procedure and the notification sound may stop if:

- The memory button is pressed.
- · The seat control switch is operated.
- The gear is shifted out of P (Park).
- The driving speed exceeds 2 mph (3 km/h).
- The driver's door is closed.

### NOTICE

- If the seat movement or notification sound stops before the process is complete, restart the resetting procedure.
- · Before resetting the IMS, make sure there are no objects on or around the driver's seat.
- After resetting the IMS, the driver's seat must be adjusted and stored again to recall the memory position.

# **Seat Easy Access Operation**

## tif equipped

Seat easy access moves the driver's seat automatically as follows:

Exiting the vehicle (driver seat)

The driver's seat moves rearward when the Start/Stop button is in the OFF position with the gear in P (Park) and the driver's door open.

Seat Easy Access operation may be limited when the driver's seat position setting is already close to the maximum rearward travel position.

Entering the vehicle (driver seat)

The driver's seat moves forward when the Start/Stop button is in the POWER ON or DRIVE READY position or while carrying the smart key, the driver's door is closed with the Start/Stop button in the OFF position.

· You can set the Seat Easy Access feature from the Settings menu in the infotainment system. Select Setup > Vehicle > Seat > Seating Easy Access > Driver Seat Easy Access > Extended/Normal/Off.



# **MARNING**

To prevent injury or property damage, be aware if there are objects or passengers in the driver's side rear seat or seat floor. To stop movement of the front seat, press any of the driver's seat control switches.

### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

# **Steering Wheel**

## **Motor Driven Power Steering (MDPS)**

If the vehicle is turned off or if the power steering system becomes inoperative, you may still steer the vehicle, but it requires increased steering effort.

If you notice any change in the effort required to steer during normal vehicle operation, contact an authorized HYUNDAI dealer.



### CAUTION

- If the MDPS of warning light and the message, 'Check motor driven power steering' illuminate on the instrument cluster, you can continue to steer the vehicle, but it requires increased effort. Contact an authorized HYUNDAI dealer and have the system inspected as soon as possible.
- The steering effort may be high immediately after moving the Start/Stop button to the DRIVE READY position.
  - This happens as the system performs the MDPS system diagnostics. When the diagnostics are completed, the steering wheel effort returns to its normal condition.
- · When the battery voltage is low, you might have to use more effort to steer. This is a temporary condition and returns to normal after charging the battery.
- A noise may be heard from the MDPS relay after the Start/Stop button is in the DRIVE READY or OFF position.
- Motor noise may be heard when the vehicle is at a stop or driving at low speeds.
- When you operate the steering wheel in low temperatures, abnormal noise may occur. When the temperature rises, the noise disappears.
- · When an error is detected from MDPS, the steering effort assist function is not activated. Instrument cluster warning lights may illuminate or the steering effort may be high. If these symptoms occur, drive the vehicle to a safe location as soon as possible. Have the system inspected by an authorized HYUNDAI dealer as soon as possible.

# Tilt/Telescopic Steering

Adjust the steering wheel toward your chest, not toward your face. Make sure you can see the instrument cluster warning lights and gauges. After adjusting, push the steering wheel up and down to be in the locked position.



#### WARNING

Never adjust the steering wheel while driving. This may cause loss of vehicle control resulting in a collision.

#### NOTICE

While adjusting the steering wheel position, please do not push or pull it hard since the fixture can be damaged.

# Manual adjustment

### tif equipped



2C\_AdjustSteeringWheelManual

- 1. Pull down the lock-release lever.
- 2. Adjust the steering wheel to the desired angle and distance forward/back.
- 3. Pull the lock-release lever up to lock the steering wheel in place.

#### INFORMATION

Sometimes the lock-release lever may not engage completely. Pull down on the lockrelease lever, readjust the steering wheel again, and then pull back up on the lock-release lever to lock the steering wheel in place.

# Power adjustment

## tif equipped



- 1. Push the switch up and down to adjust the angle.
- 2. Push the switch forward or rearward to adjust the height.

#### NOTICE

Do not adjust the steering wheel longer than necessary when the vehicle is turned off. This may result in unnecessary battery drain.

Resetting steering wheel power adjustment

If adjustment is no longer possible within the operable range while adjusting the steering wheel position (angle or height), reset as follows.

- 1. From the position the steering wheel has stopped, push the control switch for 10 seconds in the direction you were adjusting the steering wheel. The steering wheel will move in the direction the control switch is pushed.
- 2. Continue pushing the switch for at least 2 seconds after the steering wheel has stopped. Resetting will be complete after the operational range is recognized. If the adjustment is still not possible after resetting the steering wheel power adjustment, have the system inspected by authorized HYUNDAI dealer.

### **Steering Wheel Heater**





When the Start/Stop button is in the POWER ON position or when the vehicle is running, press the steering wheel heater button to warm the steering wheel.

The indicator on the button illuminates.

To turn the steering wheel heater off, press the button again. The indicator on the button turns off.

# Adjusting temperature

Press the button repeatedly to cycle through the temperature from OFF, HIGH, and LOW.

- Pressing the button or the icon when the temperature is HIGH, the heated steering wheel will turn off.
- When HIGH is manually selected, the heated steering wheel automatically changes to the LOW position after 30 minutes. You can turn off the heated steering wheel by pressing the icon to the OFF position.

# Link to climate settings for auto-adjustment

The heated steering wheel automatically controls the steering wheel temperature depending on the ambient temperature when the vehicle is running.

To use this feature, it must be enabled from the Settings menu in the infotainment system. Select Setup > Vehicle > Seats > Link to Climate Settings for Auto-Adjustment > Steering Wheel Warmer

• If you press the heated steering wheel icon when the feature is set, you must control the heated steering wheel manually.

• The heated steering wheel defaults to the OFF position whenever the Start/Stop button is pressed to the POWER ON position. However, if the Link to Climate Settings for Auto-Adjustment feature is ON, the heated steering wheel will turn on and off depending on the outside temperature.

#### NOTICE

- Do not install any cover or accessories on the steering wheel to prevent damage to the heated steering wheel system.
- Do not strike the steering wheel surface with a sharp-pointed object. This may damage the heating element in the steering wheel.
- Do not clean the steering wheel surface using the following products. Heater and steering wheel surfaces may be damaged.
  - Organic solvents such as thinner, alcohol and gasoline
  - Chemical products such as leather cleaner, coating agent, and wax

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the manual provided in the infotainment system and the guick reference guide.

# **Steering Wheel Grip Sensor**

While driving the vehicle with the Driver Assistance system on, it detects whether the driver is holding the steering wheel and displays the Hands-off warning when the driver is not holding the steering wheel. For more information on hands off warning, refer to the 'Lane Keeping Assist (LKA)', 'Lane Following Assist (LFA)', 'Highway Driving Assist (HDA)' section in chapter 7.

In the following situations, the sensor may fail to detect the driver's hands although the driver is holding the steering wheel.

- · When the driver is wearing gloves.
- When accessories such as a cover is attached on the steering wheel.
- When electronic device is touching the steering wheel.
- · When the steering wheel is wet.



### CAUTION

The steering wheel sensor may not work properly if the following precautions are not followed.

- · Do not modify the steering wheel cover.
- Do not attach accessories on the rim of the steering wheel.
- Do not touch the steering wheel with electronic devices (for example, Laptop, tablet PC, etc.).
- Do not touch the steering wheel with metallic or conductive objects (for example, Tumbler, soda can, etc.).
- · Do not excessively wet the steering wheel (for example, spilled water, wet tissue, vapor from steam wash).

# **Haptic Warning/Steering Wheel Vibration Warning**

If haptic steering wheel is available, the Driver Assistance system vibrates the steering wheel to warn the driver when the system indicates hazardous situations.

# Setting haptic warning

While the vehicle is on, select Setup > Vehicle > Driver Assistance > Warning Methods > Haptic Warning in the infotainment system.

#### Horn



To sound the horn, press the area indicated by the horn symbol on your steering wheel (see illustration). The horn operates only when this area is pressed.

#### NOTICE

- Do not strike the horn severely or hit it with your fist.
- Do not press on the horn with a sharp-pointed object.
- Do not clean the steering wheel surface with the following products:
  - Organic solvents such as thinner, alcohol and gasoline
  - Chemical products such as leather cleaner, coating agent, and wax

# **Mirrors**

#### **Inside Rearview Mirror**

Before driving your vehicle, check to see that your inside rearview mirror is properly positioned. Adjust the rearview mirror so that the view through the rear window is properly centered.



# WARNING

- Make sure your line of sight is not obstructed. Do not place objects on the rear seat or in the cargo area that may interfere with your vision through the rear window.
- To prevent serious injury during a collision or deployment of the airbag, do not modify the rearview mirror and do not install a wide mirror.
- Never adjust the mirror while driving. This may cause loss of vehicle control and result in a collision.

#### NOTICE

When cleaning the mirror, use a paper towel or similar material dampened with glass cleaner. Do not spray glass cleaner directly on the mirror as this may cause the liquid cleaner to enter the mirror housing.

# Day/night rearview mirror





2C\_InsideRearViewMirrorDayNight

- 1. Day
- 2. Night

Before driving at night, pull the day/night lever toward you to reduce glare from the headlights of the vehicles behind you.

Remember that you lose some rearview clarity in the night position.

### Electrochromic mirror





2C InsideRearViewMirrorECM

#### 1. Sensor

When the vehicle is running, the glare from vehicle headlights behind you is automatically controlled by the sensor mounted in the rearview mirror.

When the gear is shifted to R (Reverse), the mirror automatically goes to the brightest setting to improve the driver's view behind the vehicle.

# Digital Center Mirror



The Digital Center Mirror is a system that uses the camera on the rear of the vehicle and displays its image on the screen of the Digital Center Mirror. The Digital Center Mirror allows the driver to see the rearview despite obstructions, such as the head restraint or luggage, ensuring rear visibility.

# WARNING

- Failure to follow the warnings and instructions for proper use of the Digital Center Mirror could result in serious crash.
  - The Digital Center Mirror is a convenience feature but it is not a substitute for proper vehicle operation. The system has areas where objects cannot be viewed. Check the blind spot of the Digital Center Mirror before vehicle operation. The driver is always responsible for safe driving.
  - Do not operate the Digital Center Mirror while driving. Doing so can be a distraction and it could lose control of your vehicle and cause a collision or serious injury.
  - Do not disassemble or modify the Digital Center Mirror, the camera unit or wirings. If you do, it may result in crashes or fire. In case you notice smoke or smell coming from the Digital Center Mirror, stop using the system immediately. Have your vehicle inspected by an authorized HYUNDAI dealer for servicing.
- Be sure to adjust the Digital Center Mirror before driving.
  - Switch the system to the conventional rearview mirror mode and be properly seated on the driver's seat. Then adjust the mirror so as to see the rear window properly.
  - Push the lever all the way to change to digital mirror mode and adjust the display settings. Driving without adjusting the mirror may cause difficulty in watching the display at the Digital Mirror mode (camera view mode) due to the reflection from the surface of the mirror.
  - As the range of the image display by the Digital Center Mirror is different from that of the optical mirror, make sure to check this difference before driving.
- If the Digital Center Mirror malfunction, immediately switch the system to the conventional rearview mirror mode.
- When strong light (for example, sunlight or high beams from following vehicles) enters the camera, a light beam or a glaring light may appear on the monitor screen of the Digital Center Mirror. In that case, switch the system to the conventional rearview mirror mode appropriately.
- If the camera lens is dirty, the displayed image may not be clear. In this case, clean it with a soft cloth dampened with water or a swab.

#### **System component**



- Camera indicator
- 2. Mode selection lever (conventional rear view mirror/digital center mirror)
- Sensor

- 4. Icon display area
- 5. Menu/Adjustment button

### How to change the mode



- 1. DCM mode
- 2. Conventional rearview mirror mode

The mode can be switched when the switch is in the ON position.

- 1. Pull the mode select lever all the way to switch to the Digital Center Mirror mode (camera view mode).
  - Displays an image of the area behind the vehicle. In this mode, camera indicator is shown.
- 2. Push the mode select lever all the way to switch to the optical inside rearview mirror mode
  - · Turns off the display of the Digital Center Mirror allows it to be used as an optical mirror.

### Adjusting the mirror height



The height of the rearview mirror can be adjusted to suit your driving posture.

Change to optical mirror mode, adjusting the rearview mirror angle by moving it up and down.

# Display settings (Digital mirror mode)

# tif equipped



- 1. Press the menu button . The icons will be displayed.
  - Select @ to adjust the brightness of the display.
  - Select to adjust the display up/down.
- 2. Press the menu button repeatedly and select the item you want to adjust.
- 3. Press the adjustment buttons to change the setting.

The icons will disappear if the button is not operated for about 5 seconds or more.

• If the brightness of the Digital Center Mirror is set too high, it may cause eye strain. Adjust the Digital Center Mirror to and appropriate brightness. If your eyes become tired, change to optical mirror mode.



2C DCMCaution

### NOTICE

To prevent the light sensors from malfunctioning, do not touch or cover them.

Digital mirror mode operating condition

The Start/Stop button is in the DRIVE READY position.

When the Start/Stop button is changed from DRIVE READY position to POWER ON or OFF position, the image will be disappeared.

# When using the Digital Center Mirror in digital mirror mode

- When the liftgate is open, the Digital Center Mirror image may not display properly. Before driving, make sure the liftgate is closed.
- · If the display is difficult to see due to reflected light, close the sunshade for the sunroof (if equipped).
- · Any of the following conditions may occur when driving in the dark, such as at night. None of them indicates that the malfunction has occurred.
  - Colors of objects in the displayed image may differ their actual color.
  - Depending on your physical condition or age, it may take longer than usual to focus on the displayed image. In this case, change to optical mirror mode.
  - Do not let passengers stare at the displayed image when the vehicle is being driven, as doing so may cause motion sickness.

### When the system malfunctions



If the symbol shown in the illustration is displayed when using the Digital Center Mirror in digital mirror mode, the system may be malfunctioning. The symbol will disappear in a

Operate the lever, change to optical mirror mode and have your vehicle inspected by an authorized HYUNDAI dealer.



To prevent the Digital Center Mirror from malfunctioning

- · Do not use detergents, such as thinner, benzene, and alcohol to clean the mirror. They may discolor, deteriorate or damage the mirror surface.
- Do not remove, disassemble or modify the mirror and camera.
- Do not allow an organic solvent, vehicle wax, window cleaner or glass coating to adhere to the camera. If this happens, wipe it off as soon as possible.
- When cleaning the camera lens, wipe the camera lens with a damp soft cloth.
- Do not strongly rub the camera lens, as it may be scratched and will not be able to transmit a clear image.
- · Do not subject the camera to a strong impact as this could cause a malfunction. If this happens, have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.
- Operating the system at the POWER ON position while the vehicle is not running would cause discharging of the battery.
- Do not attach an antenna of wireless device near the Digital Center Mirror. Electric wave from wireless device may cause disturbed image in Digital Center Mirror.
- Do not push buttons excessively or operate the lever roughly may cause a system failure or the Digital Center Mirror itself to drop.
- Never rotate the body of Digital Center Mirror by 90° or more. It may damage the Digital Center Mirror. Do not apply strong shocks to the body of Digital Center Mirror. It may cause a system failure.
- If it is difficult to see the Digital Center Mirror display screen because of a strong external light or foreign substances on the lens surface, switch the mode to the conventional rearview mirror mode.

#### Digital Center Mirror error icon and solution

Symptom	Likely cause	Solution					
If the high temp icon is displayed on the display right side.	The Digital Center Mirror is extremely hot. (The display will gradually become more dim. If the temperature continues to increase, the Digital Center Mirror will turn off.)	<ul> <li>Reducing the cabin temperature is recommended to reduce the temperature of the mirror. (The icon will disappear when the mirror becomes cool.)</li> <li>If the icon does not disappear even though the mirror is cool, have your vehicle inspected by an authorized HYUNDAI dealer.</li> </ul>					
If the display icon has been switched to which is the display error icon.	The system may be malfunctioning	Change to optical mirror mode and have your vehicle inspected by an authorized HYUNDAI dealer.					

Symptom	Likely cause	Solution
Z		

# Electrochromic mirror (ECM) with HomeLink® system





2C ECMHomelink



2C ECMDCMHomelink

- 1. HomeLink Channel
- 2. Garage Door Opener Status Indicator: Closing or Closed
- 3. HomeLink Operation Indicator
- 4. Garage Door Opener Status Indicator: Opening or Opened
- 5. HomeLink User Interface Indicator

Your vehicle may be equipped with a Gentex Automatic-Dimming Mirror with an Integrated HomeLink® Wireless Control System.

During nighttime driving, this feature will automatically detect and reduce rearview mirror glare. The HomeLink® Universal Transceiver allows you to activate your garage door(s), electric gate, home lighting, etc.

# Automatic-Dimming Night Vision Safety™ (NVS®) Mirror

#### # if equipped

The NVS® Mirror automatically reduces glare by monitoring light levels in the front and the rear of the vehicle. Any object that obstructs either light sensor will degrade the automatic dimming control feature.

Your mirror will automatically dim upon detecting glare from the vehicles traveling behind you.

The mirror defaults to the ON position each time the vehicle is started.

For more information regarding NVS® mirrors and other applications, please refer to the Gentex website: www.gentex.com

#### Integrated HomeLink® Wireless Control System

The HomeLink® Wireless Control System provides a convenient way to replace up to three hand-held radio-frequency transmitters used to activate compatible devices such as gate operators, garage door openers, entry door locks, security systems, and home lighting.



# WARNING

Before programming HomeLink® to a garage door opener or gate operator, make sure people and objects are out of the way of the device to prevent potential harm or damage. Do not use the HomeLink® with any garage door opener that lacks the safety stop and reverse features required by U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door that cannot detect an object-signaling the door to stop and reverse-does not meet current U.S. federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

For more information, contact HomeLink® at www.homelink.com, or call Home-Link customer support at 1-800-355-3515.

It is also recommended that a new battery be replaced in the hand-held transmitter of the device being trained to HomeLink® for quicker training and accurate transmission of the radio frequency.

#### NOTICE

HomeLink® operates while the Start/Stop button is in the POWER ON position for safety reasons. It is to prevent unintentional security problems from happening when the vehicle is parked outside the garage.

#### **Programming HomeLink®**

The following steps show how to program HomeLink. If you have any questions or are having difficulty programming your HomeLink buttons, refer to the HomeLink website or call the HomeLink customer support toll-free number.

• If you choose to access the website via your cell phone, scan the QR code.



TM ECMHomelinkOR

# Programming a New HomeLink®



2C ECMHomelink 2

- 1. HomeLink button
- 2. HomeLink indicator light
- 1. When programming a garage door opener, park the vehicle outside of the garage and press the Start/Stop button to the POWER ON position.

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It is recommended that a new battery be placed in the hand-held transmitter of the device being programmed to HomeLink for quicker training and accurate transmission of the radio-frequency signal.

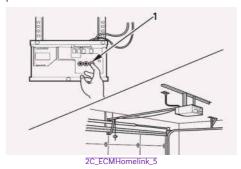
- 2. Press and release the HomeLink button, you would like to program. The HomeLink indicator light will flash orange slowly.
  - If not, perform the steps of 'Erasing HomeLink Buttons' section and start over.
- 3. Position the garage door opener remote 1-3 in. (2-8 cm) away from the HomeLink buttons.

While the HomeLink indicator light is flashing orange, press and hold the handheld remote button. Continue pressing the handheld remote button until the HomeLink indicator light changes from orange to green and release the handheld remote button.

- If you live in Canada or you are having difficulties programming a gate operator or garage door opener by using the programming procedures, while the HomeLink indicator light is flashing orange, press and release your device's handheld remote every two seconds until the HomeLink indicator light changes from orange to green.
- 4. Wait until your garage door comes to a complete stop, regardless of position, press and release the HomeLink button you are programming, and then observe the indicator light
  - If the indicator light remains solid green, your device should operate when the HomeLink button is pressed. At this point, if your device operates, programming is complete.
  - If the indicator light rapidly flashes green, firmly press, hold for two seconds and
    release the HomeLink button up to three times in a row slowly to complete the
    programming process. Do not press the HomeLink button rapidly. At this point if
    your device operates, programming is complete.

#### If the device does not operate:

1. At the garage door opener motor, (security gate motor, etc.) firmly press and release the 'Learn', 'Smart', 'Set' or 'Program' button. You now have up to 30 seconds to complete the next step.



1. Learn, Smart, Set, or Program button

#### INFORMATION

- The button can usually be found where the hanging antenna wire is attached to the motor-head unit (refer to the device's manual to locate the button). The name and color of the button may vary by manufacturer.
- A ladder and/or second person may simplify the following steps.
- 2. Return to the vehicle and firmly press, hold for two seconds and release, the HomeLink button up to three times in a row slowly. Do not press the HomeLink button rapidly. As soon as you see the garage door start to move, stop pressing any buttons until a few seconds after the garage door has come to a complete stop, regardless of position. At this point, programming is complete and your device should operate when the HomeLink button is pressed and released.

# Two-Way Communication Programming (for garage door openers)

If your garage door opener has the myQ logo on its side, your opener likely has Two-Way Communication capability. HomeLink can receive and display 'closing' or 'opening' status messages from compatible garage door openers. At any time, HomeLink can also recall and display the last recorded status communicated by the garage door opener.

To check if your garage door opener is compatible with this feature, refer to www.homelink.com/compatible/Two-way-Communication. If your garage door opener has this functionality, AND the Two-Way Communication indicators in the mirror appear while the garage door is opening/closing, then no further steps are needed. However, if the Two-Way Communication indicators in the mirror DO NOT appear while the garage door is opening/closing, use the following instructions to enable this functionality.

1. In your vehicle, press and hold the programmed HomeLink button for 2 seconds, then release. AFTER the garage door stops, you will have one minute to complete the next steps.

INFO		

A ladder and/or second person may simplify the following steps.

2. On your garage door opener in your garage, press and release the 'Learn' button (usually near where the hanging antenna wire is attached to the garage door opener). A light on your garage door opener may flash, and your Two-Way Communication indicators in your vehicle may flash, confirming completion of the process.

#### INFORMATION

If there is difficulty locating the button, refer to the owner's manual for your device.

3. Return to the vehicle and firmly press and release the programmed HomeLink button to activate your garage door. The Two-Way Communication indicators flash in orange when the door is moving. Do not make any additional button presses until AFTER the garage door has come to a complete stop.

### INFORMATION

If your garage door opener has Two-Way Communication functionality, it is possible for HomeLink to stop functioning the garage door shortly after initial programming, IF the Two-Way Communication Programming wasn't properly completed. This usually happens after the first 10 times a programmed HomeLink button is pressed. If you experience this, completing the 'Programming a New HomeLink Button' and 'Two-Way Communication Programming' will restore door operation.

### Canadian Programming

Canadian radio-frequency laws require transmitter remote signals to 'time-out' (or quit) after a couple seconds of transmission, which may not be long enough for HomeLink to pick up the signal during programming.

# **Operating HomeLink®**



2C ECMHomelink 2

- 1. HomeLink button
- 2. HomeLink indicator light

Press and release the desired programmed HomeLink button.

# INFORMATION

The HomeLink indicator light should light green, solid or flashing, and your programmed device should operate. If your device does not operate, the HomeLink programming was not successful, and you'll need to reprogram the button.

#### Two-Way Communication Display Behavior



2C ECMHomelink 7

- 1. HomeLink button
- 2. Garage Door Opener Status Indicator: Closing or Closed
- 3. HomeLink indicator light
- 4. Garage Door Opener Status Indicator: Opening or Opened
- 1. Press and release one of the programmed HomeLink buttons.
- 2. The Garage Door Opener Status Indicators operate as below, if your garage door opener has Two-Way Communication functionality.
  - If the indicator (Closing or Closed) flashes in Orange, it indicates that the garage door is 'Closing'.
  - The indicator (Closing or Closed) turns solid green once the garage door has closed.
  - If the indicator (Opening or Opened) flashes in Orange, it indicates that the garage door is 'Opening'.
  - The indicator (Opening or Opened) turns solid green once the garage door has fully opened.
  - If the indicators do not turn to green, it indicates that the last status of garage door was not received properly. The HomeLink mirror tries to receive the last known status of the garage door for a few seconds.

# **Recalling Garage Door Status**

HomeLink mirror with Two-Way Communication provides a way to view the last stored message from the garage door opener. In order to recall the last known status of the last activated device, press the first and second buttons, or the second and third buttons.

- If the indicator (Closing or Closed) appears solid Green, it indicates that the last activated device was 'closed' properly.
- If the indicator (Opening or Opened) appears solid Green, it indicates that the last activated device was 'open' properly.

### **Erasing HomeLink® Buttons**

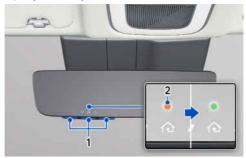
#### Erasing and Reprogramming a Single HomeLink® Button:

- 1. Press and hold the desired HomeLink button you want to re-program. DO NOT release the button.
- 2. The HomeLink indicator light will illuminate solid green. Release the button as soon as the HomeLink indicator light begins to flash orange, usually about 20 seconds.
- 3. Proceed with the steps in the 'Programming a New HomeLink®' section.

#### INFORMATION

If you do not complete the re-programming of a new device to the button, it will revert to the previously stored programming.

# Erasing ALL HomeLink® programming from ALL buttons:



2C ECMHomelinkDelete

- 1. Homel ink button
- 2. HomeLink indicator light
- 1. Press and hold the first and third buttons simultaneously. The HomeLink indicator light will illuminate solid Orange for about 10 seconds.
- 2. Release the buttons once the HomeLink indicator light changes to Green and flashes rapidly.

Now all three HomeLink buttons are cleared of any programming.

# INFORMATION

HomeLink® and the HomeLink® House logo are registered trademarks of Gentex Corporation.

The myQ logo is a registered trademark of The Chamberlain Group, Inc.

### FCC (USA) and ISED (Canada)

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 20cm from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

# FCC (Htats-Unis) et ISED (Canada)

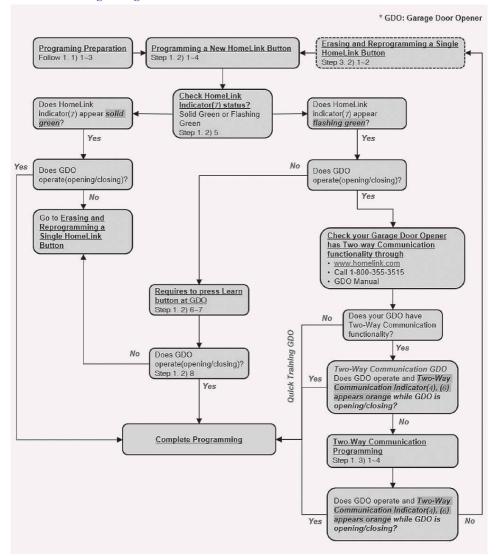
Cet appareil est conforme aux reglements de la FCC, section 15, et au CNR-210 d'Innovation, Sciences et Dhveloppement economique Canada. Le fonctionnement est assujetti aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interferences nuisibles et (2) cet appareil doit accepter toute interference recue, y compris celle qui pourrait entrainer un dysfonctionnement, MISE EN GARDE; L'emetteur a subi des tests et est conforme aux reglements de la FCC et d'ISDE. Les changements ou modifications non approuves explicitement par la partie responsable de la conformite pourraient rendre caduque l'autorisation de l'utilisateur de se servir du dispositif.

Cet appareil est conforme aux limites d'exposition aux radiations de la FCC et d'ISDE etablies pour un environnement non controle. Les utilisateurs finaux doivent respecter les instructions d'utilisation specifiques pour satisfaire aux exigences de conformite aux expositions de RF. L'emetteur doit se trouver a 20 cm au minimum de l'utilisateur et ne doit pas etre situe au meme endroit que tout autre emetteur ou antenne ni fonctionner avec un autre emetteur ou antenne.

### Meiico

La operacion de este equipo esta sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo pueda no causar interferencia danina, y (2) este dispositivo o dispositivos deben aceptar cualquier interferencia, que incluye la interferencia que puede causar su operacion no deseada.

### **HomeLink 5 Programing Flow Chart**



1C\_ECMHomelinkFlowChart

#### **Side View Mirrors**



The mirrors can be adjusted remotely with the mirror adjustment control switch. Adjust the side view mirrors to your desired position before driving.

The side view mirrors can be folded manually to help prevent damage when going through an automatic car wash or when passing through a narrow street.



#### MARNING .

- The right side view mirror is convex. Objects in mirror are closer than they appear.
- · Use the inside rearview mirror or turn your head and look to determine the actual distance of other vehicles prior to changing lanes.
- Do not adjust or fold the side view mirrors while driving. This may cause loss of vehicle control resulting in a collision.

#### NOTICE

- Do not scrape ice off the mirror face. This may damage the surface of the glass.
- If the mirror is jammed with ice, do not adjust the mirror by force. Use an approved de-icer (not radiator antifreeze) spray, or a sponge or soft cloth with very warm water, or move the vehicle to a warm place and allow the ice to melt.
- Do not clean the mirror with harsh abrasives, fuel, or other petroleum based cleaning products.

# Adjusting the side view mirrors



- 1. Press the side view mirror control selection lever either to the L or R to select the side view mirror you want to adjust.
- 2. Use the side view mirror control switch to position the selected mirror up, down, left, or right.
- 3. After adjustment, press the side view mirror control selection lever to the middle to prevent unintended adjustment.

#### NOTICE

- The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate while the switch is pressed. Do not press the switch longer than necessary, because this can damage the motor.
- Do not adjust the side view mirrors by force to prevent damage to the motor.

# Folding the side view mirror

# Manual folding





To fold the side view mirror, grasp the housing of the mirror and then fold it toward the rear of the vehicle.

### **Folding button**





The side view mirrors can be folded or unfolded by pressing the button.

#### Infotainment system

#### tif equipped

Fnable on door unlock

If Setup > Vehicle > Lights > Welcome Mirror/Light > On door unlock is selected from the Settings menu in the infotainment system, the mirror folds or unfolds when the door is locked or unlocked using the smart key or touching the touch sensor on the outside door handle.

Enable on driver approach

If Setup > Vehicle > Lights > Welcome Mirror/Light > On driver approach is selected from the Settings menu in the infotainment system, the mirror unfolds when the vehicle is approached with the smart key in possession.

#### NOTICE

- · For your safety, the side view mirrors cannot be folded automatically when driving at a speed of 9 mph (15 km/h) or faster.
- To prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary when the vehicle is not running.
- Do not fold the electric type side view mirror by hand. It may cause motor failure.

### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference quide.

# **Reverse Parking Aid**

# if equipped



C AutoReversetSideViewMirror

When the side view mirrors selection switch is in the L or R position, the side view mirrors at both sides rotate downwards to aid with checking parking lines in the rear of a vehicle. When reversing, the side view automatic mirror setting feature saves and operates the position set by the user in the R (Reverse) position, in connection with the driver's seat position memory system.

• If the side view mirror selection switch is not selected as L or R, the feature is released and the side view mirrors at both sides will not rotate when shifting the gear to R (Reverse).

# Saving reverse parking aid user settings mode

- 1. Make sure to park your vehicle in a safe place, with your vehicle turned on.
- 2. Press the L or R switch to select the side view mirror you want to adjust.
- 3. Depress the brake pedal and shift the gear to R (Reverse).
  - When L or R switch is pressed, both side view mirrors move downward to the basic set position.
- 4. Press the L or R switch to select the side view mirror you want to adjust. Then press 5 switch to adjust the side view mirror to the desired angle.
- 5. Press and hold the driver's seat position memory button 1(1) or 2(12). If the setting is successfully saved, a beep sound will ring two times, and the 'Settings 1 (or 2) saved' message may appear on the instrument cluster.
  - Set the other side view mirror following the above procedure 1 to 5.

Resetting reverse parking aid user settings mode

To change the side view mirror angle back to the basic angle, shift the gear to R (Reverse), and adjust the mirror angle higher than when the gear is in P (Park), N (Neutral) and D (Drive).

#### NOTICE

When changing the angle of both side view mirrors, it is recommended to change the angle one side at a time following the procedure 1 to 4.

Using the saved reverse parking aid setting

- 1. Press L or R of the side view mirror switch.
- 2. Press 1(12) or 2(12) where the driver's seat position is saved.
  - The side view mirror/seat/steering wheel (if equipped) operate as 1 or 2 position.
- 3. Shift the gear to R (Reverse) while depressing the brake pedal.
  - The side view mirror automatically rotates downwards to the position saved in 1 or 2.

# Windows



- 1. Driver's door open/close window switch
- 2. Front passenger's door open/close window switch
- 3. Rear door (left) open/close window switch
- 4. Rear door (right) open/close window switch
- 5. Power window lock button/Electronic child safety lock

#### **Power Windows**

The Start/Stop button must be in the POWER ON or DRIVE READY position to be able to raise or lower the windows. Each door has a Power Window switch to control the door's window. The driver has a Power Window Lock button that can block the operation of rear passenger windows. The power windows will operate for about 3 minutes after the Start/Stop button is in the OFF position, as long as the front doors remain closed.

If the front doors are opened, the battery power is turned OFF and the Power Windows do not operate.

# Window opening and closing



- 1. To open, press the window switch down to the first detent (position 1). To close, pull the window switch up to the first detent (position 1).
- 2. Release the window switch when you want the window to stop.

# Auto up/down window



Pressing or pulling up the power window switch momentarily to the second detent (position 2) completely lowers or lifts the window even when the switch is released. To stop the window at the desired position while the window is operating, pull up or press down and release the switch.



#### WARNING

- Do not leave the vehicle running and the key in your vehicle with unsupervised children. Unattended children could operate the window, which could result in serious injury.
- Do not extend your head, arms or any other body parts or objects outside the window while driving to avoid serious injury.

# Resetting the power windows

If the power windows do not operate normally, the automatic power window system must be reset as follows:

- 1. Press the Start/Stop button to the POWER ON or DRIVE READY position.
- 2. Close the window and continue pulling up on the power window switch for at least one second.

If the power windows do not operate properly after resetting, contact an authorized HYUNDAI dealer.

#### Automatic reversal





If a window senses any obstacle while it is closing automatically, it stops and lowers about 12 in. (30 cm) to allow the object to be cleared.

If the window detects any resistance while the power window switch is pulled up continuously, the window stops upward movement and then lowers about 1 in. (2.5 cm).

If the power window switch is pulled up continuously again within 5 seconds after the window is lowered by the automatic window reverse feature, the automatic window reverse does not operate.

The automatic reverse feature is active only when the 'Auto up' feature is used by fully pulling up the switch to the second detent.



Make sure body parts or other objects are safely out of the way before closing the windows to avoid injuries or vehicle damage.

Objects less than 0.16 in. (4 mm) in diameter caught between the window glass and the upper window channel may not be detected by the automatic reverse window and the window does not stop and reverse direction.

#### NOTICE

Do not install any accessories on the windows. The automatic reverse feature may not operate.

#### Power window lock button



The driver can disable the power window switches on the rear passenger doors by pressing the power window lock button.

When the power window lock button is pressed:

- The driver's master control can operate all the power windows.
- The front passenger's control can operate the front passenger's power window.
- The rear passenger's control cannot operate the rear passenger's power window.



# WARNING

Do not allow children to play with the power windows. Keep the driver's door power window lock button in the LOCK position. Serious injury or death may result from unintentional window operation by a child.

#### NOTICE

- To prevent possible damage to the power window system, do not open or close two windows or more at the same time. This also ensures the longevity of the fuse.
- Never try to operate the main switch on the driver's door and the individual door window switch in opposite directions at the same time. If this is done, the window stops and cannot be opened or closed.

# Remote window opening feature



Press and hold the Door Unlock a button on the smart key for more than 3 seconds and the windows move down after the doors are unlocked. Window movement stops when you release the Door Unlock A button.



### WARNING

Always double check to make sure arms, hands, head and other obstructions are safely out of the way before using remote window closing feature.

#### NOTICE

- · Do not leave the windows down when leaving the vehicle to prevent theft or damage from water entering the vehicle.
- The remote window opening feature operates only with the Safety Power Windows equipped.
- The remote window opening feature may abruptly stop when you move away from your vehicle during operation. Stay in close proximity from your vehicle, while monitoring the window movement.
- The doors unlock when the windows are opened using the remote window open feature.

# **Panoramic Sunroof**

# # If Equipped

If your vehicle is equipped with a sunroof, you can slide or tilt your sunroof with the sunroof control switch located on the overhead console.



The sunroof can only be operated when the Start/Stop button is in the POWER ON or DRIVE READY position.

The sunroof can be operated for about 3 minutes after the Start/Stop button is in the POWER ON or OFF position unless a front door is opened.



# MARNING

To prevent serious injury or death:

- Adjust the sunroof or sunshade when your vehicle stops.
- Do not leave the vehicle running and the key in your vehicle with unsupervised children. Unattended children could operate the sunroof.
- · Do not sit on the top of the vehicle.

#### NOTICE

Do not operate the sunroof if it contacts any roof rack or cargo.

#### **Power Sunshade**



Use the power sunshade to block direct sunlight coming through the sunroof glass.

- Push the sunroof switch rearward to the first detent position, the power sunshade automatically slides open.
- Push the sunroof switch forward to the first detent position, the power sunshade automatically closes. If the sunroof glass is open, the sunroof glass closes and then the sunshade closes.

To stop the power sunshade, push the sunroof switch in any direction.

NOTICE \_

Do not pull or push the power sunshade by hand to prevent damage.

INFORMATION

Wrinkles formed on the power sunshade are normal due to material characteristic.

# Tilt Open/Close



- Push the sunroof switch up to tilt the sunroof glass open. If the power sunshade is closed, the sunshade opens first and then the sunroof tilts.
- Push the sunroof switch upward or forward when the sunroof glass is tilt opened. The sunroof glass automatically closes.

To stop the sunroof movement at any point, push the sunroof switch in any direction.

# Slide Open/Close



- Push the sunroof switch rearward to the first detent position. The sunroof glass slides open. If the power sunshade is closed, the power sunshade opens first and then the sunroof glass opens.
  - Push the sunroof switch forward to the first detent position. The sunroof glass closes. If the sunroof glass is closed, the power sunshade closes.
- Push the sunroof switch forward or rearward to the second detent position. The power sunshade and sunroof glass operate automatically (auto slide feature). To stop the sunroof movement, push the sunroof switch in any direction.

#### Automatic reversal



If the power sunshade or sunroof glass senses any obstruction while closing, it reverses direction then stops.

The automatic reverse feature may not work if a thin or soft object is caught between the sliding power sunshade or sunroof glass and sunroof sash.



# WARNING

- Make sure that heads, hands, arms or any other body parts or objects are out of the way before operating the sunroof. Body parts or objects may get caught causing injuries or vehicle damage.
- Never deliberately use your body parts to test the automatic reverse feature.

#### NOTICE

- Do not continue to push the sunroof switch after the sunroof is fully opened, closed, or tilted. Damage to the sunroof motor may occur or may cause the sunroof system to malfunction.
- · Using the sunroof for a long time may make noise caused by dust accumulated between the sunroof and vehicle body. Open the sunroof and remove dust regularly using a clean cloth on the sunroof rail.
- Do not try to open the sunroof when the temperature is below freezing or the sunroof is covered with snow or ice. Otherwise, the motor may be damaged. In a cold and wet weather, the sunroof may not work properly.
- · Do not open or drive with the sunroof glass open immediately after rain or washing the vehicle. Water may wet the interior of the vehicle.
- Do not try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice. The sunroof may not work properly and may break if opened by force.
- Do not extend any cargo outside the sunroof while driving.



# MARNING

Do not extend your head, arms, body parts, or objects outside the sunroof while driving. Injuries may occur if the vehicle suddenly stops.

# **Resetting the Sunroof**



In some circumstances resetting the sunroof operation may need to be performed. Some instances where resetting the sunroof may be required include:

- When the 12 V battery is either disconnected or discharged
- When the sunroof fuse is replaced
- If the sunroof one-touch Auto open/close operation is not functioning properly

#### To reset the sunroof:

- 1. Start the vehicle in P (Park).
- 2. Make sure the power sunshade and sunroof glass are in the fully closed position.
- 3. Release the switch when the power sunshade and sunroof glass are fully closed.
- 4. Push the switch forward until the power sunshade and sunroof glass move slightly. Then release the switch.

#### 202 Convenience Features

5. Push and hold the sunroof switch forward again until the power sunshade and sunroof glass slide open and close.

Do not release the switch until the operation is completed. If you release the switch, start the procedure again from step 2.

#### NOTICE

If the sunroof is not reset after the vehicle battery is disconnected or discharged, or the sunroof fuse is blown, the sunroof may not operate normally.

# **Sunroof Open Warning**



2C PanoramaSunroofOpenWarning

If the driver turns off the vehicle when the sunroof is not fully closed, the warning chime sounds for several seconds and the sunroof open warning appears on the cluster display. Close the sunroof securely when leaving your vehicle.



### CAUTION

Do not leave sunroof open when leaving the vehicle to prevent theft or damage from water entering the vehicle.

# Hood

# **Opening the Hood**

Before opening the hood, shift the gear to P (Park) and make sure the vehicle has completely stopped.

1. Hood unlock button: Press the hood unlock button, which is located on the crash pad, twice.



• After pressing the hood unlock button once, you must press it again within about 3 seconds to unlock the hood. If about 3 seconds have passed, it will be reset and you will have to press the hood unlock button twice again.

Smart key button: Press and hold the hood unlock button on the smart key for about 3 seconds to unlock the hood.



2C\_SmartKeyHoodUnlockButton

Digital Key: Touch Hood Open on the Bluelink app on your smartphone (digital key) to unlock the hood.

2. Lift the unlocked hood upward.

Lift the hood halfway and it opens automatically.



#### INFORMATION

If the hood does not open, pull the hood release lever twice to open it.

# **Hood Open Warning**

When the hood opens, a warning message will be displayed on the cluster. If you drive at speeds above 2 mph (3 km/h) while the hood is opened, a warning will sound. You drive with the hood not completely closed, the speed of the vehicle may be limited, and there is a risk of the hood opening. Thus, make sure to check before driving.

# **Emergency Hood Release Lever**



# WARNING

Make sure to install the cover after using the emergency hood lever. Otherwise, this can cause serious accident if the hood opens while driving.



- 1. Open the emergency hood release cover on the left side of the footrest.
- 2. Pull the emergency hood release lever twice and then the hood will open.

# **Closing the Hood**

- 1. Before closing the hood, check in and around the motor compartment to ensure the following:
  - Any tools or other loose objects have been removed.

- All glove, rags, or other combustible material have been removed.
- · All filler caps are tightly and correctly installed.
- 2. Lower the hood until it is about 12 in. (30 cm) above the closed position and then let it drop.
- 3. Check the hood has locked properly. If the hood is raised slightly, open it again and drop it from a little higher.



### MARNING.

- Before closing the hood, ensure all obstructions are removed from around the hood opening.
- · Always double check to make sure that the hood is firmly latched before driving away. Check there is no hood open warning light or message displayed on the instrument cluster. Driving with the hood open may cause a total loss of visibility, resulting in a collision.
- Do not move the vehicle with the hood raised. It may block your vision and may result in a collision.



### CAUTION

If a smart key or a smartphone (digital key) with UWB is inside the front trunk, a warning will sound if you close the hood and the hood will open again.

# **Front Trunk**

# **Opening the Front Trunk**





- 1. Hood unlock button: Press the hood unlock button, which is located on the crash pad, twice.
  - Smart key button: Press and hold the hood unlock button on the smart key for about 3 seconds to unlock the hood.
  - Digital key: Touch Hood Open on the Bluelink app on your smartphone (digital key) to unlock the hood.
- 2. Lift the unlocked hood upward.

INFORMATION

The maximum acceptable weight is 88 lbs. (40 kg) (for 2WD) and 44 lbs. (20 kg) (for AWD).

# **Closing the Front Trunk**

Close the hood properly.



# WARNING

- Never make an attempt to get inside the front trunk. It may cause serious or fatal injuries.
- Before closing the hood, ensure all obstructions are removed from around the hood opening. The hood will rise up or move down automatically if the height is not firmly adjusted. Be aware of the damage caused by the unintended hood movements.
- Never store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for extended periods.



### CAUTION

- Do not exceed the luggage volume capacity of the front trunk. The overweighted front trunk can be severely damaged.
- Do not store the fragile objects in the front trunk.
- · Always keep the hood closed securely while driving. Items inside your vehicle are moving as fast as the vehicle. If you have to stop or turn quickly, or if there is a collision, the items can be damaged.
- Do not spray water in the front trunk. Vehicle driving system may get damaged since the front trunk is located at the center of motor compartment.
- Be careful when you store any liquid in the front trunk. If liquid leak outside the front trunk, it will cause a damage to the electric devices in the motor compartment.

#### NOTICE

To avoid possible theft, do not leave valuables in the storage compartments.

## **Emergency Front Trunk Release Button**

Use the emergency hood open button only in an emergency. Be especially careful about operating the button because it is very dangerous if the hood is opened while driving.



Open the button cover located inside the front trunk upwards and press the emergency front trunk release button.

• 1st opening position: When the vehicle is above 3 mph (5 km/h), the hood opens slightly to secure vision and airway.

• 2nd opening position: When the vehicle is below 3 mph (5 km/h), the hood opens completely and emergency escape is possible.

# **Power Liftgate**



## **Power Liftgate Operating Conditions**

The power liftgate operates when the gear is in P (Park) with the vehicle running. However, the power liftgate will operate regardless of the gear position when the vehicle is off.

When the liftgate is closed, press the power liftgate open/close button for 1 second. The liftgate will open with a warning sound.

While the liftgate is opening, press the button to stop power liftgate operation.

When the liftgate is opened, press and hold the power liftgate open/close button to close the liftgate. If you release the button while the liftgate is closing, power liftgate operation will stop with a warning sound for 5 seconds.



## WARNING

- · Never leave children or animals unattended in your vehicle. Children may operate the power liftgate. Doing so can result in injury to themselves or others and can damage the vehicle.
- Make sure that there are no people or objects in the path of the power liftgate or smart liftgate prior to use. Serious injury, damage to the vehicle or damage to surrounding objects (for example, walls, ceilings, vehicles, etc.) may result if contact with the liftgate occurs.
- The liftgate may not open or may close unintentionally injuring people around the liftgate under the following situation:
  - There is a lot of snow on the liftgate.
  - There is a heavy object on the liftgate such as a bicycle carrier, ladder, etc.

Do not open the liftgate before removing snow or heavy object on the liftgate.

#### NOTICE

- Do not close or open the liftgate manually. This may cause damage to the power liftgate. If it is necessary to close or open the liftgate manually when the battery is discharged or disconnected, do not apply excessive force.
- Do not operate the power liftgate more than 10 times continuously when the vehicle is not running. Use the power liftgate with the vehicle running when the power liftgate is used repeatedly to prevent battery discharge.
- Do not leave the power liftgate open for a long period of time. This may drain the battery.
- Do not apply excessive force when the power liftgate is operating. Doing so could result in vehicle damage.
- Do not grab or hold on to the liftgate support struts at any time. Damage to the liftgate support struts could result. Deformation of the liftgate support struts may cause vehicle damage and personal injury may occur.



2C\_GasLift

- Do not modify or repair any part of the power liftgate by yourself. This must be done by an authorized HYUNDAI dealer.
- Do not operate the power liftgate under the following conditions. The power liftgate may not operate properly.
  - One side of the vehicle is lifted to inspect the vehicle or change a tire
  - Parking on an uneven road such as a slope, etc.
- · Close the liftgate completely and lock all doors and liftgate using the central door lock button before using an automatic car wash.
- Do not spray high pressure water directly on the power liftgate outside open/close button. The liftgate may open unintentionally.
- If the liftgate is not fully closed and vehicle speed is at or above 1.8 mph (3 km/h), a warning will sound 10 times. Immediately park the vehicle at a safe place, close the liftgate, and check that the liftgate open warning on the cluster display is turned off.
- In cold and wet climates, the outside power liftgate open/close button may not work properly due to freezing conditions. If this occurs, remove the ice before using the outside power liftgate open/close button or use the Power Liftgate Open/Close button on the smart key or the instrument panel.
- Operating the power liftgate more than 5 times continuously could cause damage to the operating motor. If this occurs, the power liftgate will not operate to prevent the motor from overheating. If any of the power liftgate buttons are pressed to try to open

the liftgate, the chime will sound 3 times, but the liftgate will remain closed. Allow the power liftgate system to cool for about 1 minute before operating the system again.

# **Operating the Power Liftgate**

# Power liftgate open/close button

#### Smart key



2C\_SmartKeyTailgateOpenButton

#### Instrument panel



2C\_CrashPadTailgateOpenButton





2C\_TailgateOpenButton\_1

When the liftgate is closed, press the power liftgate open/close button for 1 second. The power liftgate opens with a warning sound.

While the liftgate is opening, press the button to stop liftgate operation.

When the power liftgate is opened, press and hold the power liftgate open/close button to close the liftgate. If you release the button while the liftgate is closing, power liftgate operation will stop with a warning sound for 5 seconds.



#### MARNING

Make sure that there are no people or objects in the path of the liftgate before pressing the open/close button inside the power liftgate and the smart key. Otherwise, this may cause serious injury or damage to the vehicle or object.



2C\_OutsideTailgateOpenButton

When the liftgate is closed, press the power liftgate open/close button to open the liftgate.

If the vehicle is locked, press the power liftgate open/close button with the smart key in your possession.

If the liftgate is unlocked, the liftgate will open or close with a warning sound when the power liftgate open/close button is pressed without carrying the smart key.



Press the power liftgate open/close button to open/close the liftgate with a warning sounds.

## Power liftgate lock button (Inside the power liftgate)



2C\_TrunkTrimTailgateLockButton

Press the power liftgate lock button while carrying the smart key. The liftgate closes and locks automatically. Additionally, all doors will lock.

The liftgate can be closed and locked, and all doors locked only when the button is pressed while the vehicle is off.

#### **Automatic Reversal**

During power liftgate operation if the power liftgate senses any obstacle, the liftgate will stop or will fully open.

The automatic reverse feature may not operate properly, or it may operate unexpectedly under the following circumstances:

- If the detected resistance is below a certain level, or if the liftgate is almost fully closed near the latched position.
- If a strong impact is applied with no obstructions placed.



#### WARNING

Never intentionally place any object or part of your body in the path of the power liftgate to make sure the automatic reverse feature operates. Serious injury, or damage to the vehicle or object may occur.

#### NOTICE

The power liftgate may stop operating if the automatic reverse feature operates more than two times while attempting to open or close the liftgate. If this occurs, carefully open or close the liftgate manually, and then after 30 seconds try to operate the power liftgate automatically again.

# **Setting the Power Liftgate**

To use each feature, you must select the opening speed or opening height from the settings menu. Deselect the settings when you do not want to use the feature.

# Power liftgate opening speed

To adjust the power liftgate speed, select **Setup > Vehicle > Door > Power Liftgate Opening Speed > Normal/Fast** in the infotainment system. (Default setting is **Fast**.)

## Power liftgate opening height

To adjust the power liftgate opening height, select Setup > Vehicle > Door > Power Liftgate Opening Height > Full Open/Level 3/Level 1/User Height Setting in the infotainment system.

## User height setting

- 1. Position the liftgate manually to the height you prefer.
- 2. Press the power liftgate open/close button located inside the liftgate for more than 3 seconds.

If User Height Setting is selected for the power liftgate opening height, the power liftgate will automatically open to the height manually set by you.

#### INFORMATION

- If the power liftgate opening height has not been manually set, the power liftgate will fully open when User Height Setting from the infotainment system is selected.
- If one of the height setting (Full Open/Level 3/Level 2/Level 1) is selected from the settings menu in the infotainment system, and then User Height Setting is selected, the liftgate will open to the height manually set by you.
- The power liftgate opening speed and opening height settings change according to the linked User Profile. If the User Profile is changed, power liftgate opening speed and opening height settings will change accordingly.
- The infotainment system may change after software updates. For more information. refer to the user's manual provided in the infotainment system and the quick reference quide.

## **Resetting the Power Liftgate**

Some instances where resetting the power liftgate may be required include:

- When the 12 V battery is recharged
- When the 12 V battery is reinstalled after removal or replacement
- When the related fuse is reinstalled after removal or replacement
- 1. With the vehicle off or running, put the gear in P (Park).
- 2. Press the power liftgate open/close inner button and outer button simultaneously until a chime sounds.
- 3. Slowly close the liftgate manually.
- 4. Press the power liftgate open/close outer button. The power liftgate will open with a chime sound.

Wait until the liftgate fully opens to complete resetting. If the liftgate stops before it is fully open, resetting cannot be completed.

#### INFORMATION

If the power liftgate does not operate properly after the above procedure, have the system inspected by an authorized HYUNDAI dealer.

## **Emergency Liftgate Safety Release**



2C\_EmergencyTailgateOpen

To unlock and open the liftgate manually from inside the cargo area. Perform the following procedure:

- 1. Remove the cover at the bottom of the liftgate.
- 2. Slide the latch in the direction of the arrow to unlock the liftgate.
- 3. Push the liftgate to open.



## MARNING .

- · For emergencies, be fully aware of the location of the emergency liftgate safety release latch in the vehicle and how to open the liftgate if you are accidentally locked in the cargo area.
- · No one, including animals, should be allowed to occupy the cargo area of the vehicle at any time. The cargo area is a very dangerous location in the event of a crash.
- Use the release latch for emergencies only. Use extreme caution, especially while the vehicle is in motion.

# **Smart Liftgate** f Equipped



On a vehicle equipped with a smart key, the liftgate can be opened with hands-free activation using the smart liftgate system.

## **Operating the Smart Liftgate**

The hands-free smart liftgate system can be used when:

- The smart liftgate option is enabled in the Settings menu in the infotainment system. Select Setup > Vehicle > Door > Smart Liftgate.
- The smart liftgate is activated 15 seconds after all the doors are closed and locked.
- The smart liftgate opens when the smart key is detected in the area behind the vehicle for 3 seconds.

After the hazard warning lights blink and the chime sounds 6 times, the smart liftgate opens.

The smart liftgate does not operate when:

- A door is not locked or closed.
- The smart key is detected within 15 seconds from when the doors were closed and locked.
- The smart key is detected within 15 seconds after the doors are closed and locked, and within 60 in. (1.5 m) from the front door handles (for vehicles equipped with Welcome Light).
- · The smart key is in the vehicle.

Smart liftgate may not operate properly if any of the following occur:

- The Smart key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the transmitter.
- The Smart key is near a mobile two way radio system or a mobile phone.
- Another vehicle's Smart key is being operated close to your vehicle.
- The temperature drops below zero degree.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference quide.

## **Detecting Area**



C\_SmartTailgateSensingRange

- The smart liftgate detecting area extends about 20-40 in. (50-100 cm) behind the vehicle. If you are positioned in the detecting area and are carrying the smart key, the hazard warning lights blinks and the chime sounds for about 3 seconds to alert you that the liftgate opens.
- The alert stops once the Smart key is moved outside of the detecting area within the 3 seconds period.

#### NOTICE

Smart liftgate detecting area may change when:

- The vehicle is parked on an incline or slope.
- One side of the vehicle is raised or lowered relative to the opposite side.

## **Deactivating the Smart Liftgate**

If you press any button on the smart key while the smart key is detected in the detecting area, the smart liftgate is deactivated.

- If you press the Door Unlock button, the smart liftgate is deactivated temporarily. If you do not open any door for 30 seconds, the smart liftgate is activated again.
- If you press the Liftgate Open button for more than 1 second, the liftgate opens.
- The smart liftgate is still activated when you press the door lock button or liftgate open/close button unless the smart key is detected in the detecting area.

# Head-Up Display (HUD)

f Equipped



2C. HUDOverview

The HUD is an optional feature that allows the driver to view information projected onto a transparent screen while still keeping your eyes on the road ahead while driving.

## **Precautions While Using the HUD**

- It may sometimes be difficult to read information on the HUD in the following situations.
  - The driver is improperly positioned in the driver's seat
  - The driver wears polarizing-filter sunglasses
  - An object is located above the HUD cover
  - The vehicle is driven on a wet road
  - Any improper lighting accessory is installed inside the vehicle, or there is incoming light from outside of the vehicle
  - The driver wears glasses
  - The driver wears contact lenses

Adjust the image height or brightness level from the Settings menu in the infotainment system.

- For your safety, make sure to stop the vehicle before adjusting the settings.
- Do not tint the front windshield glass or add other types of metallic coating.
- · Do not place any accessories on the dashboard or attach any objects on the windshield glass.
- · When replacing the front windshield glass, replace it with a windshield glass designed for HUD operation.

Otherwise, duplicated images may be displayed on the windshield glass.

#### **HUD Information**



2C\_HUDIconInfo

- 1. Turn by Turn (TBT) navigation
- 2. Traffic signs or speed limit
- 3. Surrounding vehicle (if equipped)
- 4. Lane Safety
- 5. Highway Driving Assist (if equipped)
- 6. Highway Auto Speed Change (if equipped)
- 7. Smart Cruise Control set speed
- 8. Speedometer
- 9. Smart Cruise Control vehicle distance
- 10. Lane Following Assist
- 11. Blind-Spot Safety



#### WARNING

The warning information of Blind-Spot Safety on the HUD are supplemental. Do not solely depend on them to change lanes. Always take a look around before changing lanes.

## **HUD Settings**



2C HUDSetInfo

- HUD can be enabled from the Settings menu in the infotainment system. Select Setup
   Cluster/Head-Up Display > Head-Up Display > Enable Head-Up Display.
- After turning on the HUD, you can change the settings of Display adjustment Control
  and Content selection of the HUD.

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

# **Vehicle System Over-The-Air (OTA) Update**

The OTA software update feature allows you to wirelessly update software to the latest version. Using this feature, you can keep your vehicle system up to date with the latest software.

## **Downloading Software**

The latest software can be downloaded automatically while driving. After the latest software has been successfully downloaded, you will receive a notification on your phone or the vehicle screen that the software update is available.

## **Approving Software Update**



2C OTAUpdateApprove

After the vehicle is turned off, the vehicle system will allow you to start the update.

- To start the update, press Update Now.
- To postpone the update, press Later.

# Preparing software update

If you press the **Update Now** button on the screen, the vehicle will begin installing the update automatically. The following conditions must be satisfied:

- · The vehicle must be off.
- The gear must be in P (Park).
- The Electronic Parking Brake (EPB) must be applied.
- · The exterior lights must be turned off.
- · The hood must be closed.
- · The battery must be sufficient.
- The systems to be updated must not be running.

#### INFORMATION

The battery and system status are automatically checked by the vehicle.



To update immediately, press Update Now.

To cancel the update, press Later.

# Updating software



2C\_OTACirmformProcessing\_3

You can see the progress of the update on the screen.

After the update is complete, you will receive a notification on your phone or the vehicle screen that the software update is complete.

- The screen turns off automatically after 3 minutes to save the battery. If the screen turns off automatically, you can check the update progress by pressing the Start/Stop button.
- After the update starts, you can exit the vehicle.
- The OTA software update feature is only available for HYUNDAI Connected Services users.

- The update details may vary depending on the installed software version.
- Check the notice for the OTA software update on the HYUNDAI brand web.
- If the update fails, the update recovery will automatically proceed. If you want to retry the software update, even after a successful recovery, contact the HYUNDAI Call Center.
- If the software update or recovery fails, please contact the HYUNDAI Call Center. If there is a safety issue, you may be notified by the HYUNDAI Call Center to provide services such as emergency dispatch.
- · After the update is complete, it may provide new functions or improvements. For more information, see the 'OTA Software Update' page on the HYUNDAI brand web or scan the QR code on the screen.

#### NOTICE

- · Observe the following restrictions during the update.
  - You cannot use the vehicle during the update. Be sure to have enough time for the update, and safely park the vehicle before starting the update process.
  - You cannot use remote features, including remote start.
  - If the update includes the digital key function, the door lock/unlock function via the digital key may not work. If the digital key function is updated by checking the notice, use the button on the smart key to lock or unlock the door.
  - The Rear Occupant Alert feature may not work. Check if there are any occupant in the rear seat. (Vehicles with that function)
- The update is automatically canceled if any vehicle conditions required for the update are changed before starting the update.
- Once the update has started, you cannot cancel the update.
- · You cannot use the OTA software update feature if you modify or replace any vehicle software.
- Do not open the hood or replace the battery in the vehicle during the update. The update may fail.
- If a diagnostic tool of any kind is connected to the vehicle On-board-Diagnostic (OBD) terminal, the vehicle cannot be updated. The vehicle can be updated by removing the diagnostic tool connected to the OBD terminal and then restarting the vehicle.
- If the update is not complete successfully, contact the HYUNDAI Call Center.

# **Exterior Lights**

## **Lighting Control**



- 1. OFF
- 2. AUTO headlight
- 3. → Parking light
- 4. **ID** Headlight

To operate the lights, turn the knob at the end of the control lever to the desired position.

## AUTO headlight



The headlights and parking lights are turned ON or OFF automatically depending on the amount of daylight as measured by the ambient light sensor in front of the instrument panel.

Even with the AUTO headlight feature in operation, it is recommended to manually turn ON the headlights when driving at night or in a fog, driving in the rain, or when you enter dark areas, such as tunnels and parking facilities.

#### NOTICE

- Do not cover or spill anything on the sensor located in front of the instrument panel.
- Do not clean the sensor using a window cleaner, the cleaner may leave a light film which could interfere with sensor operation.
- If your vehicle has window tint or other types of metallic coating on the front windshield, the AUTO headlight system may not work properly.

# ∌∉ Parking light



The parking lights, license plate light, and instrument panel light turn ON when you turn the knob to the 30% position.

# **E D Headlight**



2C\_HeadLampOn

The headlights, parking lights, license plate light, and instrument panel light turn ON when you turn the knob to the  $\bigcirc$  position with the Start/Stop button in the DRIVE READY position.

# **High Beam Operation**



To turn on the high beam headlight, push the lever away from you. The lever returns to its original position.

To flash the high beam headlight, pull the lever toward you, then release the lever. The high beams remain ON as long as you hold the lever.

The high beam indicator illuminates when the headlight high beams are switched on. To turn off the high beam headlight, pull the lever toward you. The low beams turn on.



#### WARNING

Do not use high beam when there are other vehicles approaching you. Using high beam may obstruct the other driver's vision.

## **Turn Signals and Lane Change Signals**



To signal a turn, completely push down (position 2) on the lever for a left turn or up (position 2) for a right turn.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal light may require replacement. Contact an authorized HYUNDAI dealer.

# One Touch Turn Signal

To use One Touch Turn Signal, slightly push the turn signal lever up or down (position 1) and then release it.

The lane change signals blinks 3, 5 or 7 times.

You can enable the One Touch Turn Signal function or choose the number of blinking from the Settings menu in the infotainment system. Select Setup > Vehicle > Lights > One Touch Turn Signal > Off/3 flashes/5 flashes/7 flashes.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

## **Battery Saver Function**

To prevent the battery from being discharging, the system automatically turns off the parking lights when the driver turns the vehicle off and opens the driver's door.

To keep the lights on when the vehicle is turned off:

Turn the parking lights OFF and ON again using the headlight switch.

## **Headlight Delay Function**

If the Start/Stop button is in the OFF position with the headlights ON, the headlights (and/or parking lights) remain on for about 5 minutes. If the driver's door is opened and closed, the headlights are turned off after 15 seconds. Also, with the vehicle off if the driver's door is opened and closed, the headlights (and/or parking lights) are turned off after 15 seconds.

The headlights (and/or parking lights) can be turned off by pressing the Door Lock button on the smart key twice or turning the headlight switch to the OFF or AUTO position.

You can enable the headlight delay function from the Settings menu in the infotainment system. Select **Setup** > **Vehicle** > **Lights** > **Headlight Delay**.

#### NOTICE

If the driver exits the vehicle through another door besides the driver's door, the battery saver function does not operate and the headlight delay function does not turn OFF automatically. To avoid battery discharge, turn OFF the headlights manually before exiting the vehicle.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

## **Headlight Moisture Removal Function**

When moisture fogs up inside of the headlight with the headlight on for a certain period of time, the fan circulates air inside the headlight to remove moisture. If moisture is not removed, have your vehicle be inspected by an authorized authorized HYUNDAI dealer.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

# **Daytime Running Lights (DRL)**

The DRL can make it easier for others to see the front of your vehicle during the day, especially after dawn and before sunset. The DRL system is ON when the headlight switch is in the OFF or the AUTO headlight position and the Electronic Parking Brake is released.

It turns off when:

- · The headlights are ON.
- The parking brake is applied.
- · The vehicle is turned off.
- The hazard warning flasher is ON.
- · The turn signal lights are ON.
  - The corresponding side of the DRL where the turn signal light is on turns off.

### **Welcome System**

Welcome system helps keep the driver visible by turning on vehicle lights when the driver approaches the vehicle.

# Dynamic welcome light



If The dynamic welcome light operates for about 4 seconds, and at the same time the position lamps come on for about 15 seconds.

When the Door Lock button or Door Unlock button on the smart key is pressed while the dynamic welcome light is on, the dynamic welcome light turns off immediately.

You can enable the dynamic welcome light function from the Settings menu in the infotainment system. Select Setup > Vehicle > Lights > Headlight Delay in the infotainment system.

## Door handle light

When all the doors (and liftgate) are closed and locked, the door handle light will turn on for about 15 seconds if:

- Setup > Vehicle > Lights > Welcome Mirror/Light > On door unlock and On driver approach is selected in the infotainment system.
  - The Door Lock button is pressed on the smart key.
  - The button of the outside door handle is pressed while carrying the smart key.
  - You put your hand in the outside door handle while carrying the smart key.
- Setup > Vehicle > Lights > Welcome Mirror/Light > On door unlock and On driver approach are selected in the infotainment system, and the smart key is detected.

You can activate or deactivate the Welcome Light function from the Settings menu in the infotainment system.

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The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

# Headlight and parking light

When the headlight switch is in the headlight or AUTO position and all the doors (and liftgate) are closed and locked, the parking lights and headlights come on for about 15 seconds when the Door Unlock button is pressed on the smart key.

If you press the Door Lock or Unlock button, the parking lights and headlights turn off immediately.

Select Setup > Vehicle > Lights > Headlight Delay from the infotainment system to turn on this function.

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The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference quide.

# Interior light

When the interior light switch is in the fip position and all doors (and liftgate) are closed and locked, the room lamps come on for 30 seconds when:

• The Door Unlock button is pressed on the smart key.

- The button of the outside door handle is pressed while carrying the smart key. (button type)
- You put your hand in the outside door handle while carrying the smart key. (touch sensor type)

If you press the Door Lock or Unlock button on the smart key, the lights turn off immediately.

## Lighting pattern

The lighting pattern displays patterns of various designs on the digital grid. During daytime, the lighting pattern is basically set so that it can be seen only when the vehicle is turned on. When the low beam is turned on, the lighting pattern also turns on while driving.

At nighttime, you can check the lighting pattern when the vehicle is turned on and while driving.

· With the vehicle in the ON position, select the type of pattern provided in infotainment system Setup > Vehicle > Lights > Lighting Patterns.

#### INFORMATION

One basic pattern is provided when applying the specification. Five additional patterns can be purchased only for Prestige trim Platinum option or Calligraphy trim vehicles.

Go to the Bluelink Store homepage and purchase 'Lighting Patterns' to try out various lighting patterns. The Bluelink Store can be accessed through the lighting pattern screen of the infotainment system or QR in the 'Bluelink Store Guide' in this manual.

https://commerce.hvundai.com/link/fod



TL VGSORcode

# **High Beam Assist (HBA)**



2C HBASwitch

HBA automatically adjusts the headlights between high beam and low beam depending on the light detected from oncoming vehicles or vehicles in front using the front view camera.

For more information on the location and the general precautions of front view camera, refer to the 'Sensor Information' section in chapter 7.

#### **HBA Settings**



## MARNING

Only change the settings after parking your vehicle at a safe location.



2C HBASetInfo

With the Start/Stop button in the DRIVE READY position, go to the Settings menu to turn on HBA and deselect to turn off the function in the infotainment system. Select Setup > Vehicle > Lights > High Beam Assist.

## **HBA Operation**

- After selecting High Beam Assist from the settings menu to operate HBA:
  - Place the headlight switch in the AUTO position and push the turn signal lever toward the instrument cluster. HBA point indicator light illuminates.
  - When HBA is enabled, high beams turn on when the vehicle speed is above 20 mph (30 km/h) and the High Beam ≣● indicator light illuminates. When the vehicle speed is below 12 mph (20 km/h), high beams do not turn on and the indicator light illuminates in white

- When HBA is operating:
  - If the turn signal lever is pulled toward you when the high beams are off, the high beams turn on. When you let go of the turn signal lever, HBA operates again.
  - If the turn signal lever is pulled toward you when the high beams are on by HBA, the low beams turn on and HBA turns off.
  - If the turn signal lever is pushed away from you, the high beams turn on and HBA turns off.
  - If the headlight switch is moved from AUTO to another position (headlight/position/off), the corresponding light turns on and HBA turns off.
- · When HBA is operating, high beam switches to low beam if:
  - The headlights of an oncoming vehicle are detected.
  - The tail lights of a front vehicle are detected.
  - The headlight or tail light of a motorcycle or a bicycle is detected.
  - The surrounding ambient light is bright enough so high beams are not required.
  - Streetlights or other lights are detected.

#### INFORMATION

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

## **HBA Malfunction and Limitations**

#### HBA malfunction

When HBA is not working properly, the 'Check Driver Assistance system' warning message may appear, and the \( \triangle \) warning light may illuminate on the instrument cluster. Contact an authorized HYUNDAI dealer.

#### Limitations of HBA

HBA may not work properly in the following situations if:

- The headlights from an oncoming or front vehicle is damaged or out of the detection range.
- The headlights from an oncoming or front vehicle are covered with dust, snow, or water.
- An oncoming or front vehicle's headlights are off but the fog lamps are on.
- There are lights that have a similar shape as a vehicle's light ahead.
- The headlights are not repaired or replaced properly.
- · The headlights are not aimed properly.
- · You are driving on a narrow curved road, rough road, uphill, or downhill.
- A front vehicle is partially visible at a crossroad or on a curved road.
- There is a temporary reflector or flash ahead (construction area).
- There is a traffic light, reflecting sign, LED sign, or reflectors ahead.
- The road is wet or covered with snow or ice.
- A vehicle suddenly appears from a curve.
- The vehicle is tilted due to a flat tire or being towed.

#### 232 Convenience Features

• The headlights from an oncoming or front vehicle is not detected because of exhaust fumes, smoke, fog, snow, blizzard, water spray on the road, or windshield condensation, etc.

For more information on the limitations of the front view camera, refer to the 'Forward Collision-Avoidance Assist (FCA)' section in chapter 7.



#### **MARNING**

Always check road conditions, and if necessary, take appropriate actions to drive safely. It is your responsibility to operate your vehicle in a safe manner.



## **CAUTION**

- If HBA does not operate properly, use the turn signal lever to switch between high beam and low beam.
- · HBA may not operate for 15 seconds right after your vehicle is started or when the front view camera is initialized.

# **Interior Lights**



#### WARNING

Do not use the interior lights when driving in the dark. The interior lights may obscure your view and result in a collision.

#### NOTICE

Do not use the interior lights for extended periods when the vehicle is turned off. Otherwise, the battery discharges.

## **Interior Lights Auto Off**

The interior lights automatically go off about 20 minutes after the vehicle is turned off and the doors are closed. If a door is opened, the light go off about 25 minutes after the vehicle is turned off. If the doors are locked by the smart key and the vehicle enters the armed stage of the theft alarm system, the lights go off five seconds later.

## **Front Lights**



- > > : Press the lens to turn on or off the map lamp. Press the button to turn on the room lamp for the front and rear seats.
- प्र: Press the button to turn on the room lamp for the front and rear seats.
- (%): The front or rear room lamps come on when the front or rear doors are opened.

When doors are unlocked by the smart key, the front and rear lamps come on for about 30 seconds as long as any door is not opened. The front and rear room lamps go out gradually after about 30 seconds when the door is closed. However, if the Start/Stop button is in the POWER ON or DRIVE READY position or all doors are locked, the front and rear lamps turn off. If a door is opened with the Start/Stop button in the OFF position, the front and rear lamps stay on for about 10 minutes.

## **Rear Room Lamp**



ক্ল: Press the button to turn on and off the rear lamp.

# **Rear Personal Lamps**



স: Press the button to turn on and off the rear room lamp.

# **Vanity Mirror Lamp**

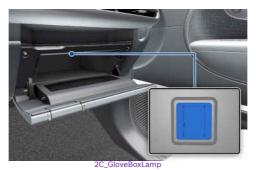


Opening the lid of the vanity mirror. The vanity mirror lamp turns on when the lid is opened and off when the lid is closed.

Always have the switch in the off position when the vanity mirror lamp is not in use. If the sunvisor is closed without the lamp off, it may discharge the battery or damage the sunvisor.

## **Glove Box Lamp**





The glove box lamp turns on when the glove box is opened.

If the glove box is not closed, the lamp turns off after 20 minutes.

#### NOTICE

Close the glove box after use to prevent unnecessary battery discharge.

# **Two-Way Multi Console Lamp**



The two-way multi console lamp turns on when you turn on the interior button lights while the Start/Stop button is in the POWER ON or DRIVE READY position.

The two-way multi console lamp turns off when you turn off the interior button lights and the Start/Stop button is in the OFF position.

For more information on the interior button lights, refer to the 'Interior Button Lights' section in this chapter.

## **Interior Button Lights**

The interior lighting including the button lighting are continuously on to make it easy to locate buttons and items during both day and night.

## Set Daytime Lighting

You can enable or disable the exterior and interior button lighting. Select Vehicle > Lights > Set Daytime Lighting from the infotainment system.

- When all doors are locked, opening a door after unlocking it briefly turns on the interior lighting.
- When the Start/Stop button is in the POWER ON position, it keeps the interior lighting on at all times.
- When the Start/Stop button is in the OFF position, the interior lighting briefly stays on. At this time, when the door is opened and closed, or locked, the interior lighting immediately turns off.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

## **Mood Lighting**





- 1. Door trim
- 2. Dashboard

To set the brightness and color of the mood lighting, select Setup > Vehicle > Lights > Ambient Lighting in the infotainment system.

- If the Link to DRIVE MODE is selected, the mood lighting color changes according to the selected drive mode.
- If you do not want to use mood lighting, set Brightness to 0 in the infotainment system.

#### INFORMATION

- The mood lamps at both ends of the dashboard turn off to prevent reduced visibility of the side view mirror when the vehicle is not in P (Park).
- The infotainment system may change after software updates. For more information, refer to the manual provided in the infotainment system and the quick reference guide.
- The color of the mood lighting may seem different under some conditions depending on the color of the interior and the set mood color.

## **Front Trunk Lamp**



The lamp illuminates when the front trunk opens.

The lamp keeps coming on when the front trunk is not completely closed.



## **CAUTION**

Make sure it is fully closed after closing the front trunk. If it is left open without starting vehicle, the lamp comes on and the battery may be discharged.

# **Cargo Area Lamp**



The cargo area lamp comes on when the liftgate is opened.

NOTICE

Close the liftgate after use to prevent unnecessary battery discharge.

# **Wipers And Washers**

## **Front Windshield Wipers**



2C\_WiperSwitchOverview

- 1. Speed control knob
- HI: The wiper runs at a higher speed.
- LO: The wiper runs at a lower speed.
- AUTO: The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops. To vary the speed setting, turn the speed control knob up for faster operation and down for slower operation..
- OFF: Wipers are not in operation.
- MIST: For a single wiping cycle, push the lever downward and release. The wipers operate continuously if the lever is held in this position.

#### NOTICE

- If there is heavy accumulation of snow or ice on the windshield, defrost the windshield for about 10 minutes, or until the snow and/or ice is removed before using the windshield wipers to ensure proper operation.
- · If you do not remove the snow and/or ice before using the wiper and washer, it may damage the wiper and washer system.
- · If it snows while driving, the wiper may temporarily stop operation to prevent damage caused by accumulated snow at the upper and lower parts of the window. When the wiper stops operation, clear the accumulated snow from the parts.
- The wiper operation is stopped upon snow accumulation while driving. This is normal wiper operation. It is to prevent safety issues from happening when the wiper operation continues without removing snow.

## AUTO (Automatic) control



2C RainSensor

The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the interval of the wiping cycle.

To change the sensitivity setting, turn the sensitivity control knob.

If the wiper switch is set in the AUTO mode when the Start/Stop button is in the DRIVE READY position, the wiper operates once to perform a self-check of the system. Set the wiper to the OFF position when the wiper is not used.



### WARNING

To prevent personal injury:

- Do not touch the upper end of the windshield glass facing the rain sensor.
- Do not wipe the upper end of the windshield glass with a damp or wet cloth.
- · Do not put pressure on the windshield glass.

#### NOTICE

- When washing the vehicle, set the wiper switch in the OFF position to stop the auto wiper operation.
- Do not remove the sensor cover located on the upper end of the passenger side windshield glass.

#### Front windshield washers



2C WasherSwitch

In the OFF position, pull the lever gently toward you to spray washer fluid on the windshield and to run the wipers 1-3 cycles. The spray and wiper operation continues until you release the lever. If the washer does not work, you may need to add washer fluid to the washer fluid reservoir.

#### Recirculating air when washer fluid is used

When washer fluid is used, in order to reduce any objectionable scent of the washer fluid from entering the cabin, recirculation mode and air conditioning are automatically activated depending on the outside temperature. If you select fresh mode while the function is operating, the function resumes after a certain amount of time. It may not work in some conditions such as cold weather or vehicle OFF.

For more information, refer to the 'Climate Control Additional Features' section in this chapter.

For more information, refer to the 'Climate control addition features' section in chapter 5 of the complete Owner's Manual.



## WARNING

When the outside temperature is below freezing, always warm the windshield using the defroster to prevent the washer fluid from freezing on the windshield and obscuring your vision that could lead to a collision resulting in serious injury or death.

Always use appropriate washer fluids in the winter season or cold weather.

#### NOTICE

- Do not operate the washer when the fluid reservoir is empty or when the windshield is drv.
- Do not operate the wipers when the windshield is dry.
- Do not attempt to move the wipers manually.
- Use anti-freezing washer fluids in the winter season or cold weather.

## **Rear Windshield Wipers**



2C WiperRearSwitch

- HI: High wiper speed
- LO: Low wiper speed
- · OFF: Off

## Auto rear wiper



The rear wiper operates while the vehicle is in reverse with the front wiper on. You can select the function from the Settings menu in the infotainment system. Select **Setup** > **Vehicle** > **Convenience** > **Auto Rear Wiper (in R)**.

For more information, refer to the 'Recirculating Air When Washer Fluid is Used' section in this chapter.

For more information, refer to the 'Recirculating air when washer fluid is used' section in this chapter of the complete Owner's Manual.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

#### Rear windshield washers



Push the lever away from you to spray rear washer fluid and to run the rear wipers 1-3 cycles. The spray and wiper operation continues until you release the lever.

# **Camera Cleaning System**

## tif equipped

Contaminated camera (digital center mirror camera, wide-rear view camera) can blur the image displayed on the screen. Spray the washer to clean it.



To spray washer fluid on the camera, slide the wiper switch toward the cluster.

#### 242 Convenience Features

- The rear window wiper operates and washer fluid is sprayed onto the rear window and
- · If you push and hold the switch, the wipers will operate and washer fluid will be sprayed repeatedly on the rear window and camera.
- Release the switch once the camera is cleaned. Washer will stop spraying.
- If dirt on the camera has not been removed, clean the camera lens with a soft cloth or cotton swab moistened with water.



## CAUTION :

• Be careful not to clog the nozzle when washing the car or maintaining the vehicle.

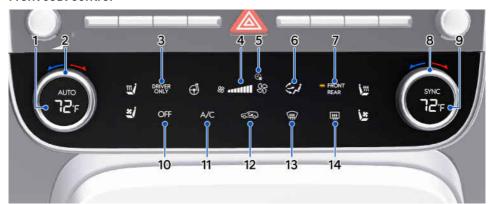


- 1. Wide-rear view camera
- 2. Digital center mirror camera (if equipped)
- · If the nozzle becomes contaminated, remove the contamination by wiping it with a soft cloth or cotton swab moistened with water.

# **Automatic Climate Control System**



## Front seat control



- 1. AUTO (automatic control)
- 2. Driver's temperature control
- 3. DRIVER ONLY
- 4. Fan speed control
- 5. Scheduled climate
- 6. Mode selection
- 7. Front/Rear climate control information screen
- 8. Passenger's temperature control
- 9. SYNC
- 10.0FF
- 11. A/C (air conditioning)
- 12. Air intake control
- 13. Front windshield defroster
- 14. Rear window defroster

### Rear seat control from the front



- 1. Temperature control
- 2. Fan speed control
- 3. Mode selection
- 4. Front/Rear climate control information screen
- 5. AUTO (automatic control)
- 6. OFF
- 7. A/C (air conditioning)

#### Rear seat control

#### tif equipped



- 1. Temperature display
- 2. AUTO (automatic control)
- 3. Temperature control
- 4. A/C (air conditioning)
- 5. Mode selection
- 6. Fan speed control
- 7. OFF

#### INFORMATION

Temperature, Mode selection (air flow direction), and Fan speed can be controlled from the rear seat. However, if Setting > Vehicle > Climate > Climate Features > Lock Rear Climate Controls is selected, the rear climate control can be operated only from the front seat.



#### 🔼 WARNING \_

- Do not sleep in your vehicle with the air conditioning ON. It may lead to serious injury or death.
- Do not drive for a long time while the air conditioning is ON in a confined space as it may cause headaches or drowsiness.



## **CAUTION**

Heater/air conditioning can operate while the vehicle is turned off, but it may lower its efficiency and guickly discharge the battery. Turn on the vehicle when operating the climate control.

Screen distortion that occurs when you press the screen strongly is a normal phenomenon that can occur due to the characteristics of LCD.

#### **Automatic Heating and Air Conditioning**

The Automatic Climate Control System is controlled by setting the desired temperature.

1. Press the AUTO button.



- The modes, fan speeds, air intake, and air conditioning are controlled automatically by the temperature setting.
- You can control the fan speed in three stages by pressing the AUTO button during automatic operation.
- 2. Turn the temperature control knob to set the desired temperature.



#### INFORMATION

If the temperature is set to the lowest setting, the air conditioning system operates continuously. After the interior has cooled sufficiently, adjust the knob to a higher temperature set point whenever possible.

To turn off the automatic operation, select any button of the following buttons:

- A/C button
- Mode selection button
- · Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign illuminates on the information screen once again.)
- Fan speed control button

The selected function is controlled manually while other functions operate automatically.





Never place anything near the sensor to ensure better control of the heating and cooling system.

#### INFORMATION

For your convenience and to improve the effectiveness of the climate control, use the AUTO button and set the temperature to 72 °F (22 °C).

### **Manual Heating and Air Conditioning**

Set the various heating and air conditioning system such as fan speed, mode, temperature, air intake, etc., as desired.

#### Mode selection

Front seat mode selection



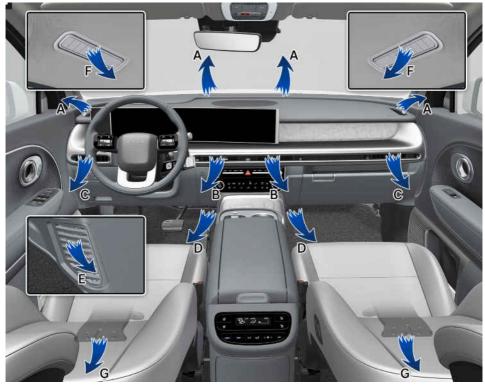
#### Rear seat mode selection



2C\_RearAirconModeSelection

The mode selection button controls the direction of the air flow through the ventilation system.

## Air flow direction



 $\overline{1C\_AutoAirconModeSelectionOverview}$ 

Symbol	Operation					
<b>В</b> , С, F	Select for effective cooling.  Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.					
B, C, D, E, F, G	Air flow is directed toward the face and the floor.					
A, C, D, E, G	Select for effective heating.  Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield, side window defrosters and side vent.					

# **Symbol** Operation



A, C, D, E, G

Most of the air flow is directed to the floor, windshield and side window defrosters, with a small amount of the air being directed to the side vent.

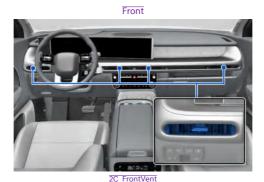
#### Front windshield defroster (A, C)



Press the front windshield defroster button (indicator light ON) to turn on the front windshield defroster. The outside (fresh) mode is automatically selected and the air conditioning turns on according to the detected ambient temperature.

Press the front windshield defroster button once more (indicator light OFF) to turn the function off. Each climate control setting reverts to the setting prior to selecting the front windshield defrost.

### Instrument panel vents (B, C, F)



2nd row center



#### 2C RearVent

The instrument panel vent air flow can be directed up/down or left/right using the vent adjustment lever.

• Front vents: Move the lever all the way to the 🛇 direction to close, and to the 🥃 direction to open the air vents.

### Temperature control

#### Front seat control



- Turn the knob to the right to increase the temperature. Turn the knob to the left to decrease temperature.
- To adjust the temperature of the rear seat from the front seat, press the \_\_\_\_\_\_\_ button and turn the knob to adjust when the rear seat air conditioning screen appears.

#### Rear seat control from the rear



Press the v button to decrease the temperature.

Press the \(\triangle\) button to increase the temperature.

Temperature conversion ( ${}^{\circ}C \leftrightarrow {}^{\circ}F$ )

To change the temperature unit from °C to °F or °F to °C, select Setup > General > Units > **Temperature Unit** > °C/°F in the infotainment system.

#### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

## Driver only



If you press the DRIVER ONLY button (indicator light ON), most of the air flow is directed toward the driver's seat.

- Some of the airflow may be directed to other seating position to keep indoor air pleasant while using **DRIVER ONLY**.
- · When using the front windshield defroster, the air flow on the both sides of windshield continues to operate regardless of the activation of **DRIVER ONLY**.

### SYNC (Adjusting the driver and passenger side temperature equally)



- Press the SYNC button (indicator light ON) to adjust the driver and passenger side temperature equally.
- Press the SYNC button (indicator light OFF) again to adjust the driver and passenger side temperature individually.

#### Air intake control

Recirculated air position



With the recirculated air selected, air from the passenger compartment is drawn through the climate control system.

#### Outside (fresh) air position



With the outside (fresh) air selected, air enters the vehicle from outside and is drawn through the climate control system.



To prevent serious injury or death:

- Continued climate control system operation in the recirculated air position may allow humidity to increase inside the vehicle that could fog the windshield and the side windows and obscure visibility.
- Do not sleep in a vehicle with the air conditioning or heating system on.
- Continued climate use of recirculated air may cause drowsiness or sleepiness, and loss of vehicle control. Set the air intake control to the outside (fresh) air position while driving.



# **CAUTION**

Using the system in the fresh air position is recommended.

Prolonged operation of the heater in the recirculated air position (without air conditioning selected) can cause fogging of the windshield and side windows and the air within the passenger compartment will become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

## Fan speed control

Front seat control



- Press the & button to increase fan speed and airflow. Press the & button to decrease fan speed and airflow.
- button and then when the rear seat air conditioning screen appears, press the &, & button.

Rear seat control from the rear



Press the v button to decrease the fan speed.

Press the A button to increase the fan speed.

Operating the fan speed when the Start/Stop button is in the POWER ON position may cause the battery to discharge.

## Air conditioning



- Press the A/C button to manually turn on the system on (indicator light ON) and off.
- To adjust the air conditioning in the rear seat from the front seat, press the \_\_\_\_\_\_ button and press the A/C button when the rear seat air conditioning screen appears.

#### OFF mode



Press the **OFF** button to turn off the climate control system.

You can still operate the mode buttons and air intake buttons as long as the Start/Stop button is in the DRIVE READY position.

#### INFORMATION

- Water dripping on the ground of the vehicle is normal after the use of the air conditioning.
- Avoid prolonged operation of the air conditioning in the circulated air position when operating in/outside mode. Carefully adjust to let outdoor air circulate regularly.
- Use the air conditioning system every week for around 5 minutes at once to avoid the potential breakdown of the system.
- Open the windows for a short time to let the hot air inside the vehicle escape.
- Excessive use of air conditioning during the hot summer may increase moisture outside
  the window due to the difference between the temperature of the outside and inside
  the vehicle. Change the air flow direction and adjust the air control to the lowest level.
- In humid weather, if the windows are open and the air conditioning is running, water droplets may form inside the vehicle and around the air vent. In this case, use the air conditioning system with the windows closed to prevent any potential damage to electrical equipment.

Avoid leaves, snow, or other objects to block the grill as the source of air for the heater and air conditioning flows into the grill. When cooling, foggy air can be seen as the outside air draws into the vehicle. This is a normal condition since the humid air flows into the vehicle while cooling the vehicle rapidly.

### **System Operation**

#### Ventilation

- 1. Set the mode to the -> position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Adjust the fan speed control and temperature control as desired

## Heating

- 1. Set the mode to the vi position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Adjust the fan speed control and temperature control as desired.
- 4. If desired, turn the air conditioning ON with the temperature control knob set to heat in order to dehumidify the air before it enters into the cabin.

If the windshield fogs up, set the mode to the vi or position.

## **Operation Tips**

- To help keep dust or unpleasant fumes from entering the vehicle through the
  ventilation system, temporarily set the air intake control to the recirculated air position.
  Be sure to return the control to the fresh air position when the irritation has passed to
  keep fresh air in the vehicle. This can help keep the driver alert and comfortable.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and the fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to the desired temperature.

## Air conditioning

1. Start the vehicle. Press the air conditioning button.

- 2. Set the mode to the -> position.
- 3. Set the air intake control to the outside air or recirculated air position.
- 4. Adjust the fan speed control and temperature control as desired.

#### NOTICE

- When using the air conditioning system, monitor the temperature gauge closely while
  driving up hills or in heavy traffic when outside temperatures are high. Continue to use
  the fan but turn off the air conditioning system if the temperature gauge indicates the
  vehicle is overheating.
- Always use the air conditioning with the windows closed. In humid weather, if the
  windows are open and the air conditioning is running, water droplets may form inside
  the vehicle and potentially damage electrical equipment.

### Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- After sufficient cooling has been achieved, switch back from the recirculated air position to the fresh outside air position.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system with the windows and support closed.
- Use the air conditioning system every month for a few minutes to ensure maximum system performance.
- If you operate the air conditioner excessively, the difference between the temperature of the outside air and that of the windshield may cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection button to the position and set the fan speed control knob to the lowest speed setting.

## **System Maintenance**

#### Cabin air filter

The cabin air filter is installed behind the front trunk in the motor compartment. It filters the dust or other pollutants that enter the vehicle through the heating and air conditioning system. Have the cabin air filter replaced by an authorized HYUNDAI dealer according to the maintenance schedule. If the vehicle is being driven in severe conditions such as dusty or rough roads and/or if transporting pets or occupants smoke inside the vehicle, then more frequent cabin air filter inspections and changes are required.

### **INFORMATION**

- Replace the filter according to the maintenance schedule.
- If the car is being driven in severe conditions such as dusty, rough roads, more frequent cabin air filter inspections and changes are required.
- When the air flow rate suddenly decreases, have the system inspected by an authorized HYUNDAI dealer.

## Checking the amount of air conditioner refrigerant

If the amount of refrigerant is too low or too high, the performance of the air conditioning is reduced. Have the system inspected by an authorized HYUNDAI dealer.





- To prevent serious injury, have the air conditioning system be serviced by only trained and certified technicians. R-1234yf is flammable and operated at high pressure. Reclaim all refrigerants with proper equipment. Venting refrigerants directly to the atmosphere is harmful to individuals and environment.
- The refrigerant system should only be serviced by trained and certified technicians in a well-ventilated area to ensure proper and safe operation.
- Never repair the air conditioning evaporator (cooling coil) or replace with the one removed from a used or salvaged vehicle. A new replacement evaporator must be certified (and labeled) as meeting SAE Standard J2842.

## Air conditioning refrigerant label

For more information, refer to the 'Refrigerant Label' section in chapter 10.

## **Windshield Defrosting And Defogging**

- For maximum defrost performance, set the temperature control to the highest temperature setting and the fan speed control to the highest setting.
- If warm air to the floor is desired while defrosting or defogging, select the floor-defrost position.
- Before driving, clear all snow and ice from the windshield, rear window, side view mirrors, and all side windows.
- Clear all snow and ice from the hood and air inlet to improve heater and defroster
  efficiency and to reduce the probability of fogging up the inside of the windshield.



#### WARNING

Do not use the defrost-level mposition during the cooling operation in extremely humid weather. The outer surface of the windshield may fog and reduce visibility, causing a collision that results in serious injury or death. Set the mode selection button to the face-level position and lower the fan speed.

#### **Automatic Climate Control System**

### To defog inside windshield

- 1. Adjust the fan speed control and temperature control as desired.
- 2. Touch the defroster button.
  - The air conditioning turns on and automatically selects the outside (fresh) air mode according to the detected ambient temperature.
  - If the air conditioning, outside (fresh) air mode and higher fan speed are not selected automatically, adjust the corresponding switch.
  - If the defrost switch is selected, the fan speed increases.

#### To defrost outside windshield

- Set the fan speed to the highest position and the temperature to the hottest (HI) position.
- 2. Touch the defroster button.
  - If the defrost switch is selected, lower fan speed is adjusted to higher fan speed.

#### **Rear Window Defroster**



To activate it, press the rear window defroster button located in the center control panel. The indicator on the rear window defroster button illuminates when the defroster is ON.

• To turn it off, press the rear window defroster button again.

#### NOTICE

Never use sharp instruments or window cleaners containing abrasives to clean the window to prevent damage to the rear window defroster.

#### INFORMATION

- If there is heavy accumulation of snow on the rear window, brush it off before operating the rear defroster.
- The rear window defroster automatically turns off after about 20 minutes or when the Start/Stop button is in the OFF position.

## Side view mirror defroster



The side view mirror defrosters operate when you turn on the rear window defroster.

### **Climate Control Additional Features**

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The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

### **Air Conditioning Auto drying**

The Air conditioning auto drying feature dries the moisture in the air conditioner and reduces air conditioner odor. The blower motor automatically operates 30 minutes after the vehicle is turned off.

### Turning Air conditioning auto drying on or off

The Air conditioning auto drying feature can be turned on and off by selecting **Vehicle** > **Climate** > **Climate** Features > **Air Conditioner Auto-Dry** from the infotainment system.

If the operating condition is satisfied after setting the feature, the operating condition appears on the automatic climate control system and the blower motor automatically operates.

When the Air conditioning auto drying feature is activated, the air conditioner sets the fan speed to the third level, selects outside (fresh) mode, and directs the air flow toward the face.

#### **Operating conditions**

- The vehicle is turned off after operating the air conditioner for a certain period.
- The battery level is sufficient and the outside temperature is above a certain level.

### **Non-operating conditions**

- The Air conditioning auto drying feature has operated for 10 minutes.
- The Start/Stop button is pressed, or the vehicle is POWER ON or DRIVE READY position.
- The climate control system is operated remotely.

#### INFORMATION

The Air conditioning auto drying feature reduces air conditioner odors but may not remove all odors.

### Auto Defogging System





2C. RainSensor

The Auto defogging reduces the possibility of fogging up the inside of the windshield by automatically sensing the moisture on inside the windshield.

The Auto defogging system operates when the heater or air conditioning is on.

When the Auto defogging system operates, the @wwo indicator illuminates.

If high amount of humidity is detected in the vehicle, the Auto defogging system is enabled.

The following steps are performed automatically:

- 1. Air conditioning turns on and Outside (fresh) mode is selected.
- 2. Defrost level is selected.
- 3. Fan speed is set to the highest level.

If the air conditioning is off or recirculated air is manually selected while Auto defogging system is ON, the Auto defogging system horizontalian indicator blinks to signal that manual operation has been canceled.

#### INFORMATION

The Auto defogging system may not operate normally, when the outside temperature is below 14 °F (-10 °C).

## Turning Auto defogging system on or off

### **Climate control system**

Press the front windshield defroster button for 3 seconds when the Start/Stop button is in the POWER ON or DRIVE READY position.

- System ON: The defroster button indicator blinks 6 times.
- System OFF: The defroster button indicator blinks 3 times.

#### Infotainment system

Auto defogging system can be turned on and off by selecting Vehicle > Climate > Defog/ **Defrost Options** > **Auto Defog** from the infotainment system.

#### NOTICE

- Do not remove the sensor cover located on the top of the windshield glass. Damage may not be covered by your vehicle warranty.
- Do not select recirculated air while the Auto defogging system is operating.

#### INFORMATION

When Auto defogging system is operating, fan speed adjustment, temperature adjustment, and air intake control selection are all disabled.

### **Auto Dehumidify**

#### f equipped

To increase cabin air quality and reduce windshield misting, recirculation mode switches off automatically after about 5 to 30 minutes, depending on the outside temperature, and the air intake changes to fresh mode.

## Turning Auto dehumidify on or off

#### **Climate control system**

To turn the Auto dehumidify feature on or off, select Face level  $\checkmark$  mode and press the air intake control ६ button at least 5 times within 3 seconds while pressing the A/C button. When Auto dehumidify is turned on, the air intake control button indicator blinks 6 times. When turned off, the indicator blinks 3 times.

#### **Infotainment system**

Auto dehumidify can be turned on and off by selecting **Vehicle** > **Climate** > **Automatic Ventilation** > **Automatic Dehumidify** from the infotainment system.

## Recirculating Air When Washer Fluid is Used

## tif equipped

Recirculation mode automatically activates to reduce the scent of the washer fluid entering the cabin when the windshield washer is used.

When it is shifted to the recirculation mode, the unpleasant scent may flow into the vehicle.

However, in cold weather to prevent the windshield from fogging up, the recirculation mode may not be selected.

## Turning Activation on a washer fluid use on or off

#### **Climate control system**

To turn the Activate on washer fluid use feature on or off, select Floor level  $\checkmark$  mode, and then press the air intake control  $\hookleftarrow$  button 5 times within 3 seconds while pressing the A/C button. When Activate on washer fluid use is turned on, the air intake control button indicator blinks 6 times. When turned off, the indicator blinks 3 times.

#### **Infotainment system**

Activate on washer fluid use can be turned on and off by selecting **Vehicle** > **Climate** > **Recirculate Air** > **Activate upon Washer Fluid Use** from the infotainment system.

### Recirculating Air When Entering a Tunnel

### tif equipped

To prevent the inflow of polluted air into the vehicle when passing through a tunnel, the windows and climate control system are operated using the navigation map information and vehicle speed as follows:

To use this feature, it can be enabled from the infotainment system. Select Setup > Vehicle > Climate > Recirculate Air.

• Activate upon Entering Tunnels: The vehicle's windows automatically close, and the climate control system switches to recirculation mode for about 7 seconds before entering a tunnel.

The windows open to the previous position after passing through the tunnel. If the power window switch is operated before the windows open, the windows do not return to the previous position.

### Operating conditions

- The climate control system's fresh mode is selected.
- The window(s) are open.

The windows close automatically only when your vehicle is applied with the automatic up/down window feature for all seats.



### MARNING

Be careful not to get any body parts caught when the windows are closing.

### INFORMATION

- The activation time for the feature may differ because of the time gap between the GPS and vehicle speed.
- The feature activates until you have passed through continuous tunnels.
- · When entering a tunnel, recirculation mode may cause fogging of the windshield. Use the front windshield defroster button.

If the humidity is high, it may automatically change to fresh air mode for safety reasons.

- The feature does not operate in short tunnels.
- The feature may not activate if the GPS is not working properly.
- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference quide.

#### **Scheduled Ventilation Control**

## f equipped

The Scheduled ventilation control releases hot air in the vehicle to lower cabin temperature before getting in the vehicle.

Depending on the outside ambient temperature, the blower is operated for 5 to 15 minutes while the vehicle is parked.

### Turning Scheduled ventilation control on or off

The Scheduled ventilation control can be turned on and off by selecting **Setup > Vehicle** > **Climate > Automatic Ventilation > Scheduled Ventilation** from the infotainment system. Also, the starting time can be set within 24 hours. Scheduled ventilation control operates only once when the feature is set.

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The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

#### **Rear Climate Auto Off**

#### if equipped

This feature automatically turns off the rear seat climate when there is no passenger in the rear seat.

To use this feature, it can be enabled from the Settings menu in the infotainment system. Select:

Setup > Vehicle > Climate > Climate Features > Rear Climate Auto Off

#### Operating conditions

When the vehicle is stopped or parked with all doors closed, and the rear seat ventilation is in operation.

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The Rear climate auto Off may not operate in the following situations:

- If the vehicle moves due to the movement of another vehicle nearby while the function is operating.
- When the window is open and affected by other external movements.
- If there is a water bottle, clothes, etc. indoors and there is shaking in the vehicle.
- In case of movement of passengers in front seat, adjustment of seats, etc.

## **Air Conditioning ECO Mode**

ECO mode helps improve energy efficiency for eco-friendly driving.

• To use this feature, it can be enabled from the Settings menu in the infotainment system. Select:

Setup > Vehicle > Climate > Climate Features > Climate Control Eco Mode

Drive mode	Air conditioning system control
ECO	ECO/NORMAL
NORMAL	NORMAL
SPORT	NORMAL
MY DRIVE	NORMAL

Drive mode	Air conditioning system control
SNOW	NORMAL

### Automatic Controls Linked to Climate Control Settings (for Driver's Seat)

### t if equipped

The temperature of the driver's seat warmer, air ventilated seat and heated steering wheel is automatically controlled depending on the inside and outside temperature of the vehicle when the vehicle is running.

To use these features, it must be enabled from the Settings menu in the infotainment system screen. Select: Setup > Vehicle > Climate > Link to Climate Settings for Auto-**Adjustment** 

For more information, refer to the 'Seat Warmers and Air Ventilation Seats' section in chapter 3 and 'Steering Wheel' section in chapter 5.

### **Smart Ventilation**

### tif equipped

The smart ventilation system maintains pleasant/fresh air conditioning inside the passenger compartment by automatically detecting/controlling the temperature and humidity level when you drive the vehicle with the climate control system in OFF position. When the smart ventilation system starts to operate, the message appears for about 5 seconds.

To use this feature, it can be enabled from the Settings menu in the infotainment system. Select:

## Setup > Vehicle > Climate > Automatic Ventilation > Smart Ventilation

The smart ventilation system stops when:

- OFF button is selected.
- Any of the buttons of the climate control is selected for operation.

#### NOTICE

The smart ventilation system may not operate when the vehicle is driven at low speed.

## **Storage Compartment**



## MARNING

- Never store cigarette lighters, propane cylinders, or other flammable/explosive materials in the vehicle. These items may catch fire and/or explode if the vehicle is exposed to hot temperatures for an extended period of time.
- Always keep the storage compartment covers closed securely while driving. Items inside your vehicle are moving as fast as the vehicle. If you have to stop or turn quickly, or if there is a collision, the items may fly out of the compartment and may cause an injury if they strike the driver or passengers.



#### ♠ CAUTION

To avoid possible theft, do not leave valuables in the storage compartments.

### Two-Way Multi Console



2C CenterConsoleBox

- 1. Front button
- 2. Rear button

You can use this space to store small items etc.

- · When sitting in the front seat, press the front button to open the console cover towards the 1st row seats.
- When sitting in the 2nd row seats, press the rear button to open the console cover towards the 2nd row seats.

If you remove the internal storage box, you can use both the upper and lower trays to store larger items. You can store the removed storage box in the front tray.



### WARNING

After removing the storage box, do not pull the sliding tray lever when loading large items. This can damage your belongings.



- Make sure body parts are out of the way when closing the console cover after use.
- Avoid storing food items in the two-way multi console for extended periods.

## **Sliding Console**

#### tif equipped



2C MovingMultiConsole

You can move the console box by pulling the lever and pushing or pulling it forward/ backward

After moving the sliding type console box, be sure it sound 'Click' when you lock it up.



### MARNING

Do not move the sliding console while the vehicle is moving. It can be dangerous in the event of a sudden stop or collision.



### CAUTION

If you move the sliding type center console box with excessive force, the console box rail or lever may be damaged.

# **Sliding Tray**





2C InteractiveMulticonsoleBottomStorageBox

1. Removable partition

Pull the handle to open the storage compartment. Use it to store long items. The space can be separated by using a removable partition.



# **CAUTION**

Avoid storing food items in the sliding tray for extended periods.

#### **Glove Box**



To open, pull the lever. Always close the glove box door after use.



## MARNING

An open glove box door may cause serious injury to a passenger in a collision, even if the passenger is wearing a seat belt.

## **Open Tray**





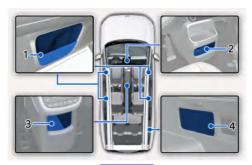
You can use this space to store small items etc.



### MARNING .

Do not put sharp objects in the tray. In a collision, they can come loose from the tray and injure occupants.

## **Storage**



2C\_StorageBox

This storage is designed to store small items.

- 1. Door tray
- 2. Center console storage
- 3. 2nd row console storage
- 4. Cargo storage



## MARNING.

Do not put sharp objects in the tray. In a collision, they can come loose from the tray and injure occupants.

## **Cargo Tray**



2C\_CargoCompartmentStorageOrganizationBox

Use the cargo tray to organize and store small items such as tools. To use the tray, lift the luggage floor by the handle.

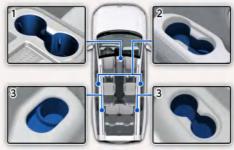


# **CAUTION**

- When storing small or easily movable items, they may cause noise while driving.
- Do not store fragile items in the cargo tray.

### Interior Features

## **Cup Holder**



2C\_CupHolderCenterConsole

- 1. Front seat
- 2. Rear (2nd row seat)
- 3. Rear seat (3rd row seat)

Cups or small beverages cups may be placed in the cup holders.



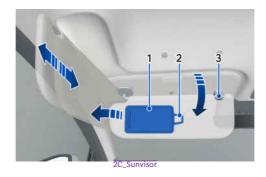
## MARNING

- Avoid abrupt starting and braking when the cup holder is used to prevent spilling your drink. If hot liquid spills, you may be burned. Such a burn to the driver may cause loss of vehicle control resulting in a collision.
- Only use soft cups in the cup holders.
- · Keep cans or bottles out of direct sun light and do not put them in a hot vehicle. It may explode.

#### NOTICE

- Keep your drinks sealed while driving to prevent spilling.
- When cleaning spilled liquids, do not use hot air to blow out or dry the cup holder.

#### Sunvisor



- 1. Vanity mirror
- 2. Ticket holder
- 3. Bracket

To use the sunvisor, pull it downward.

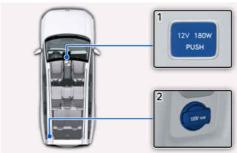
- · To use the sunvisor to block the sun from the side window, release it from the bracket and swing it to the side toward the window. Adjust the sunvisor forward or backward as needed.
- To use the vanity mirror, slide the mirror cover. Close the vanity mirror cover securely and return the sunvisor to its original position after use.
- Use the ticket holder to hold tickets.



## WARNING

Do not block your view when using the sunvisor.

#### **Power Outlet**



2C PowerOutlet

- 1. Center console storage
- 2. Cargo storage

The power outlet is designed to provide power for mobile phones or other devices designed to operate with vehicle electrical systems. The device should draw less than 12 V, 180 W with the vehicle running.



## MARNING

Avoid electrical shocks. Do not place your fingers or foreign objects (pin, etc.) into a power outlet or touch the power outlet with a wet hand.

#### INFORMATION

#### To prevent damage to the power outlets:

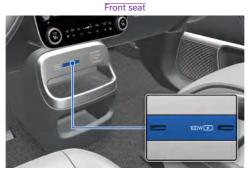
- · Use the power outlet only when the vehicle is running and remove the accessory plug after use. Using the accessory plug for an extended period of time with the vehicle off may cause the battery to discharge.
- Only use 12 V electric accessories that are less than 180 W in the electric capacity.
- Adjust the air conditioner or heater to the lowest operating level when using the power outlet.
- Close the cover when not used.
- Some electronic devices may cause electronic interference when plugged into a vehicle's power outlet.
- Push the plug in as far as it goes. The plug may overheat and the fuse may open.
- Only connect devices with reverse current protection or the current from the device battery may cause the vehicle's electrical/electronic system to malfunction.

## 100W USB charging terminal



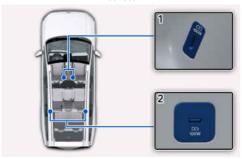
### CAUTION

- To prevent your vehicle's battery from discharging, charge only when the vehicle is turned on.
- Avoid entering foreign substances, beverages, and water into the USB charging terminal. This may damage the charging terminal.
- · When charging with 'C to A type USB convertible adapter', use an exclusive charge for your device. If you use a product that is not equipped with over-current prevention or system for stabilization, then this may damage the charging terminal.
- The use of inappropriate parts that may cause the malfunction of the USB terminal and infotainment system can be excluded from warranty coverage. Only the genuine parts specified for your vehicle are guaranteed by our firm.



2C\_USBChargeOutlet

#### Rear seat



2C\_USBChargeOutlet\_1

- 1. 2nd row 100W USB charging port
- 2. 3rd row 100W USB charging port

When in 'DRIVE READY', 'POWER ON' or utility mode, you can charge various devices such as smartphones and tablets by connecting them to the USB charging terminal.

Depending on the device's request or specification of the connected charging cable, the total output supported by the USB charger can be up to 100W.

• When using one port in the front seat: 100W supported



• When using two ports in the front seats: Up to 50 W supported for each port



- For cables compatible with 100W, 100W/MAX USB charging port can support up to 60
  W. Otherwise, it can support 27 W.
- Using the genuine charger specified for your vehicle can support up to 100 W. The color of the light indicates the charging status.

The color of the light is designed for a driver's convenience. If a problem occurs repeatedly, contact an authorized HYUNDAI dealer.

Color	USB charging port state	Measure
White	Normal	Ξ

Color	USB charging port state	Measure
(Default)		
Yellow	The USB charging port (charger) is in normal condition, but the connected device or cable is abnormal and charging has stopped	- Check if there are any problems with the connected device or cable. Then reconnect it If the same problems occurs repeatedly, replace it with other compatible cable or check to see if the connected device is normal.
Red	Turns on when there is a malfunction with the charging device	Stop charging immediately. Have your vehicle be inspected by an authorized HYUNDAI dealer.

#### INFORMATION

- The battery charging state may be monitored on the electronic device. Disconnect the USB cable from the USB port after use.
- A smartphone or a tablet PC may get warmer during the recharging process. It does not indicate any malfunction with the charging system.
- A smartphone or a tablet PC that does not use a USB cable to charge should be charged using its own charger.
- Do not attempt to use the charging terminal either to turn on an audio or to play media with the infotainment system.
- Charging may not be possible when using a Type-C to A converter sold by a mobile phone manufacturer or commercially available.

# 100W Charging cable (2M, USB-C)



### CAUTION

- To prevent your vehicle's battery from discharging, charge only when the vehicle is turned on.
- Avoid entering foreign substances, beverages, and water into the 100W charging cable plug. This may damage the 100W charging cable.
- Do not use any device whose the current consumption exceeds 5.0 A.
- When charging with 'C to A type USB convertible adapter', use an exclusive and genuine adapter for your device. If you use a product that is not equipped with over-current prevention or system for stabilization, then this may damage the 100W charging cable plug.
- The use of inappropriate parts that may cause the malfunction of the 100W charging cable plug and infotainment system can be excluded from warranty coverage.

A 100W charging cable supports up to 100 W depending on the specifications of the connected device and charging terminal.

LED light(indicator) of a 100W charging cable indicates its operation status.



2C\_100WChargingCable

### 1. LED indicator light

Color	100W Charging cable state	Notes
White (Default)	Hyundai Motors authorized product	Support up to 100 W
Blue	Hyundai Motor Company has not certified genuine products	Support up to 60 W
Indicator off	USB-IF PD 3.0 Non-Specification	Support up to 27 W



## CAUTION

- Charging status is displayed on the screen or display on a device.
- · It is normal that the temperature of a device can be raised when it is charged, or data is transmitted.
- Data can be damaged if you remove a product while data is transmitted.
- This product is designed to be compatible with USB-IF USB 2.0, PD 3.0. There can be limitations when using other types of standards.
- When connecting a device with 'C to A type USB convertible adapter', not a genuine adapter, the device may not operate.
- Avoid using a contaminated 100W charging cable plug. This may cause a serious accident.
- Connection to a device may differ depending on the shape of the 100W charging cable.
- The 100W charging cable is a consumable product. If charging/communication is difficult after the warranty period(a year), repurchase it.

#### Cluster Fascia Side Panel

#### tif equipped



#### MARNING

Do not attach the cellular phones and heavy or sharp items to the cluster fascia side panel for safety reason.

This could result in loss of control, and an accident causing death, serious injury, or property damage.



## **CAUTION**

Do not attach heavy items such as cellular phones. Dropping while driving, the items can be damaged.



The cluster fascia side panel is a pad to attach light items such as parking tickets, receipts, etc., using its magnetic surface.

## **Wireless Smartphone Charging System**

## tif equipped

The wireless charging process starts when you put a Qi-enabled smartphone on the wireless charging unit with the screen facing up.

• The wireless smartphone charging system charges only Qi-enabled smartphones (4). Visit your smartphone manufacturer's website to check whether your smartphone supports the Qi technology.



2C\_WirelessSmartPhoneChargingSystem

- 1. Indicator light
- 2. Charging pad
- 1. The wireless smartphone charger is available when all doors are closed, and when the Start/Stop button is in the POWER ON or DRIVE READY position.
- 2. Turn on the wireless charging function from the Settings menu in the infotainment system. Select Setup > Vehicle > Convenience > Wireless Charging System for Mobile Devices.
- 3. Place the smartphone on the center of the wireless charging pad.
  - Remove other items, including the smart key and the card key from the wireless charging pad.
  - The indicator light is orange when the smartphone is charging and turns blue when phone charging is complete.

If your smartphone is not charging:

- Move the smartphone on the charging pad.
- Make sure the indicator light is orange.

The indicator light blinks orange for 10 seconds if there is a malfunction in the wireless charging system.

The system warns you with a message on the cluster display if the smartphone is still on the wireless charging unit after the vehicle is turned OFF and the front door is opened.



#### CAUTION

- The wireless charging process may stop when there is any metallic item, such as coin, between the wireless smartphone pad and smartphone.
- Some magnetic items such as credit cards, phone cards, or transit cards may be damaged if left with the smartphone during the charging process.

#### NOTICE

- The wireless smartphone charging system may not support smartphones that do not meet the Qi specification (4).
- Wireless charging may stop temporarily when the smart key is used, or when starting the vehicle or locking/unlocking the doors.
- When charging certain smartphones, the charging indicator may not change to blue when the smartphone is fully charged.
- The wireless charging process may temporarily stop, when the temperature abnormally increases inside the wireless smartphone charging system. The wireless charging process does not restart, until the temperature falls.
- For some manufacturer's smartphones, the system may not warn you even though
  the smartphone is left on the wireless charging unit. This is due to the particular
  characteristic of the smartphone and not a malfunction of the wireless charging.
- When using a smartphone application (such as Android Auto) while charging, charging
  may be delayed or stopped. This is not a problem with the wireless charging system
  but is caused by the smartphone overheating. Please remove the smartphone from the
  charging pad.
- If the smartphone has a thick case, it may not charge.
- When any smartphone without a wireless charging function or a metallic object is
  placed on the charging pad, a small noise may sound because the vehicle discerns
  compatibility of the object placed on the charging pad. It does not affect your vehicle
  or the smartphone.
- If the Start/Stop button is in the OFF position, the charging stops.

#### Clock

The clock can be set from the infotainment system. For more information, refer to the infotainment system manual.

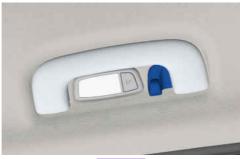


#### WARNING

Do not attempt to adjust the clock while driving.

#### **Coat Hook**





2C. CoatHook

These hooks are not designed to hold large or heavy items.





Only hang soft clothing without heavy, sharp or breakable objects in the clothes pockets. In a collision or when the curtain airbag is inflated, the objects could move and cause serious injury.

## **Plastic Bag Hook**





Hooks are located on the left of the front trunk.

#### NOTICE

Do not hang heavy items. It may cause damage to the hook.

### Floor Mat Anchor(s)

ALWAYS use the floor mat anchor(s) to attach the front and 2nd row floor mats to the vehicle and prevent the mats from sliding forward.



To prevent serious injury or death from a floor mat interfering with the brake or accelerator pedals:

- Remove any protective film on the carpet before installing a floor mat.
- · Check floor mats are securely attached to the vehicle's floor mat anchors before driving.
- Do not use ANY floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (for example, all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat must be installed in each position.

To avoid any interference with pedal operation, install the HYUNDAI floor mat designed for use in your vehicle.

### Rear Side Sunshade





Use the rear side sunshade to block the light coming through the rear seat windows. Lift the rear side sunshade and hang the sunshade on both sides of the hook.



#### CAUTION

- · Always hang both sides of the rear side sunshade on the hook. This could cause damage to the rear side sunshade if only one side of the sunshade is hooked.
- Do not let any foreign material get in between the vehicle and the rear side sunshade. The rear side sunshade may not be lifted up.

## **Cargo Net Holder**





2C\_CargoNet\_2

To keep items from shifting in the cargo area, use the 4 holders located in the cargo area side trim to attach the cargo net.

Make sure the cargo net is securely attached to the holders in the cargo board.



#### MARNING

- Avoid eye injury. Do not overstretch the cargo net. Always keep your face and body out of the cargo net's recoil path.
- Do not use the cargo net when the strap has visible signs of wear or damage.
- Use the cargo net to keep only light items from shifting in the cargo area.

### Cargo Security Screen

### f equipped



Use the cargo security screen to cover items stored in the cargo area.

## Using the cargo security screen



Pull the cargo security screen towards the rear of the vehicle and insert the guide pin into the guide.

- Pull out the cargo security screen with the handle in the center to prevent the guide pin from falling out of the guide.
- · The cargo security screen may not automatically slide back in if the cargo security screen is not fully pulled out. Pull the cargo screen out all the way and then slowly allow the screen to retract back in.

When the cargo security screen is not in use:

- Pull the cargo security screen backward and up to release it from the guides.
- The cargo security screen will automatically slide back in.



#### MARNING

- · Do not place objects on the cargo security screen. Such objects may be thrown around inside the vehicle and possibly injure vehicle occupants during a collision or when braking.
- Never allow anyone to ride in the cargo area. It is designed for luggage only.
- Maintain the balance of the vehicle and locate the weight as forward as possible.

 $\frac{ \hbox{Since the cargo security screen may be damaged or malformed, do not put luggage on it } {\hbox{when it is used.}}$ 

## **Exterior Features**

#### **Roof Side Rails**





If your vehicle is equipped with roof side rails, you can add roof rack crossbars as an accessory (not shown).



#### WARNING

Loading cargo or luggage in excess of the specified weight limit on the roof side rails may damage your vehicle.

ROOF SIDE RAILS	220 lbs. (100 kg) EVENLY DISTRIBUTED

- Avoid sudden starts, braking, sharp turns, abrupt maneuvers, or high speeds that may result in loss of vehicle control or rollover resulting in a collision. The vehicle center of gravity is higher when items are loaded onto the roof side rails.
- Always drive slowly and turn corners carefully when carrying items on the roof side rails. Severe wind updrafts caused by passing vehicles or natural causes, can cause sudden upward pressure on items loaded on the roof side rails. This is especially true when carrying large, flat items such as wood panels or mattresses. This may cause the items to fall off the roof side rails and cause damage to your vehicle or others around you.
- To prevent damage or loss of cargo while driving, check frequently before or while driving to make sure the items on the roof side rails are securely fastened.



#### CAUTION

- If the vehicle is equipped with a sunroof, do not position the cargo onto the roof side rails in such a way that it may interfere with sunroof operation.
- Always take precautions to make sure the cargo does not damage the roof.
- When carrying large objects on the roof side rails, make sure they do not exceed the overall roof length or width.
- When carrying cargo on the roof side rails, take necessary precautions to make sure the cargo does not damage the roof of the vehicle.

## **Infotainment System**



For more information, refer to the infotainment system manual.

#### NOTICE

- Do not install an aftermarket HID headlight. Your vehicle's audio and electronic devices may not function properly.
- Prevent chemicals such as perfume, cosmetic oil, sun cream, hand cleaner, and air freshener from contacting the interior parts because they may cause damage or discoloration.

### **Vehicle Settings**

Vehicle Settings in the infotainment system provides user options for a the settings including door lock/unlock features, convenience features, driver assistance settings, etc.

- 1. Press the **SETUP** button on the main keyboard.
- 2. Select **Vehicle** to change the settings for features.

## Vehicle Settings menu

- Driver Assistance
- Drive Mode
- Climate
- Seat
- Lights
- Door
- Digital Keys
- Convenience



### WARNING

Do not adjust the Vehicle settings while driving. You may be distracted from the driving task and could crash.

- The information provided may differ depending on which functions are available to your vehicle.
- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference quide.

#### **USB Port**



The USB port can be used while the vehicle is running.

- You can use an USB cable to connect audio devices to the vehicle USB port.
- After connecting a media storage device such as a MP3 or USB to the USB port, you can listen to music through the vehicle's speakers or play it on the infotainment system.
- Small electronic devices can be charged.

#### NOTICE

• When connecting a Type-A USB or a memory device to a vehicle, use a genuine converting adapter (C to A type) specified for your vehicle. A commonly used adapter is not equipped with any measures to reduce noise, prevent overcurrent and maintain stability. Connecting an unspecified cable may damage the vehicle's USB port or the connected devices. Contact an authorized HYUNDAI dealer for more information on accessories for HYUNDAL vehicles.



2C\_USBConvertingAdapter

• The use of non-genuine parts may damage the USB port and infotainment system. Damage cannot be covered by your vehicle warranty.

- Some devices may not be charged through USB port.
- When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, disconnect the USB cable and use the portable audio device's power source.

#### **Antenna**



2C SharkAntenna

- 1. Inside the crash pad
- 2. Top of windshield
- 3. Glass antenna

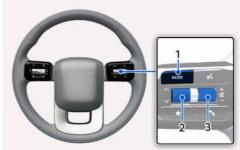
The hidden antenna receives transmitted data (for example, AM/FM, SXM).



## **CAUTION**

- Be careful of antenna damage by checking the height of the vehicle before entering low-ceiling spaces such as automated parking lots or automated washing machines.
- Be careful not to contact the antenna when loading cargo on the roof rack. Antenna transmission/reception performance may be degraded.

## **Steering Wheel Remote Controls**



2C AudioButtonOverview

NOTICE

Do not operate multiple audio remote control buttons simultaneously.

No.	description	
1	MODE Media mode	
2	<ul> <li>∧/➤ When you press briefly</li> <li>RADIO mode</li> <li>MEDIA mode: TRACK UP/DOWN button</li> <li>When you press and hold (more than 0.8 seconds)</li> <li>RADIO mode: AUTO SEEK button to seek until you release the button</li> <li>MEDIA mode: FF/RW button</li> </ul>	
3	+/-VOLUME CONTROL,	

## **Bluetooth® Wireless Technology**



- 1. Call/Answer/Call end button (Steering wheel)
- 2. Microphone (Map lamp)

For more information, refer to the infotainment system manual.



## MARNING

To prevent driver distraction, minimize your use of these features while driving. Distraction may cause a collision, resulting in serious injury or death.

## **Voice Recognition**



 $\overline{2C\_SteeringWheelVoiceRecognitionButton}$ 

For more information, refer to the infotainment system manual.

## Vehicle To Load (V2L)

### f Equipped

Using the V2L feature, you can turn on electronic devices by connecting them to the high voltage battery.

## Safety Precautions When Using the V2L Function

Before using the V2L function, read and comply with all the safety information below. Failure to do so may cause electric shock or fire and result in serious injury, death, vehicle malfunction, or property damage.

## Precautions when using the V2L function



## MARNING

- Do not use the V2L function if the V2L connector, charging inlet, power plug, or cable is damaged, corroded, or rusted.
- Do not touch the V2L connector, charging inlet, or power plug with wet hands.
- Do not use the V2L function if the connection part of the V2L connector and the charging inlet is loose.
- Check if there is no water, dust, or other contaminants before connecting the connector and the power plug. They may cause electric shock or fire.
- Do not put metal objects or touch the V2L connector or charging inlet with bare hands.
- For electric devices used outdoors in a vehicle, use a product that is waterproof or use it in a waterproof environment. If rain or humidity intrude into electric devices. multi-outlets, extension cords, etc., it may cause electric shock or damage the vehicle or devices.
- If there is a risk of lightning, do not use the V2L function outside the vehicle.
- Do not use electric heating appliances such as an electric kettle, toaster, or iron in the vehicle. Doing so may result in a fire and injury.

## Precautions when the cooling fan operates



## MARNING



2C MotorRoomHotCaution

When using the V2L, the cooling fan in the vehicle motor compartment can operate automatically even if the vehicle is turned off. Do not put your hand near the cooling fan when the V2L is operating.

## Precautions for handling and using the V2L connector



## **CAUTION**

- Do not modify or disassemble the V2L connector. It may cause fire, electric shock, or injury. Damage to your vehicle caused by modification and disassembling is not covered by warranty.
- · Be careful when connecting or disconnecting the power plug to the V2L connector or when opening or closing the V2L connector cover. You may scratch your hand.
- Be sure to disconnect the V2L connector from the vehicle when you are finished using V2L.
- Do not charge the vehicle using the V2L connector. If you charge the vehicle arbitrarily by remodeling the power cable of the connector, etc., it may damage the vehicle.
- Do not place objects on the V2L connector. It may damage the cable and cause electric shock or fire.
- · Do not drop the V2L connector or apply any impact on it. Keep it clean in a dry place without water or humidity.

## Precautions when using electric/electronic products



## CAUTION

- Before using the product, check the precautions and how to use the product referring to the product manual.
- Only use products that have obtained national safety certification.
- · Only use an electric device that does not exceed the maximum power capacity that the vehicle can supply. However, some of the electric devices may not operate normally even if the product has power consumption less than the maximum power capacity provided by the vehicle.
  - Electric devices that require high power during initial operation.
  - Measuring devices that need to process accurate data.
  - Electric devices that are sensitive to inverter type AC charger.
- Do not use products that require a continuous power supply, such as medical equipment. The power supply may be interrupted depending on the vehicle's condition.
- The V2L discharging mode is blocked automatically in the event of overheating. When the discharging mode is blocked, check whether the V2L connector or power plug is contaminated, worn, corroded or broken.
  - If the temperature falls to a proper level after it is left unattended, you can use it again.
  - If overheating repeats when using a certain electric device, do not use the electric device.
- Do not connect more than two extension cords or multi-outlet. Also, when using the extension cable, ensure that the cable is not twisted. Heat from the overlapped cable may cause fire.
- · Do not hang home appliances on the wire.
- Do not use if the sheath of home appliance cables is damaged or broken.
- Fully insert the power plug when connecting it to the power.
- Only use qualified power plug with ground connection that meets the standard. Do not use worn, corroded, or broken power plug or improper power plug that does not meet the standard.

## **Using Electricity Outside the Vehicle**

Before using V2L function, carefully read all the safety information and precautions on the 'Safety Precautions When Using the V2L Function' section and follow the instructions.

- 1. Open the cover of the V2L connector.
- 2. Close the cover after connecting the plug of an electronic product to the power outlet of the connector.



#### WARNING

Some types of plugs may not fit into the outlet cover of the V2L connector, causing incomplete closing of the cover. Do not use the V2L connector on a rainy or snowy day if the outlet cover is not completely closed. There is a risk of fire and/or injury.

- 3. Open the connection terminal protection cap of the connector with the open switch pressed.
- 4. Open the charging door and connect the V2L connector to the charging inlet on the vehicle.
  - Connect the V2L connector to the charging inlet within 60 seconds after opening the charging door.
  - Time remaining until the battery level reaches the set value, and the distance to empty at the set value appears on the instrument cluster or the infotainment system.
- 5. Press the power switch of the V2L connector.
  - The power is supplied and the indicator on the V2L connector is turned on.

- When the V2L connector is connected to the charging inlet of the vehicle, all doors and connectors will be automatically locked to prevent theft and separation. To disconnect the V2L connector, unlock the door and pull the connector with the open switch pressed.
- · Before using the V2L function, deactivate the scheduled climate setting referring to the 'Safety Precautions When Using the V2L Function'. The V2L function may be cut off depending on the scheduled climate setting.
- To check and change the V2L setting, refer to the 'Setting a Battery Discharging Limit When Using Vehicle to Load (V2L)' section in chapter 6.
- If an electric device that exceeds the maximum power capacity is connected, a warning message appears on the instrument cluster and the power supply shuts off immediately.
- When using electricity outside of a vehicle, if any electric device is connected to an internal electricity panel in the vehicle, the power is also supplied to the power panel in the vehicle. Disconnect any electric devices not in use from the power panel.

## **Using Electricity Inside the Vehicle**

You can connect home appliances or electric devices to the power outlet inside the vehicle and use them normally.



#### WARNING

Do not use an electric heating appliances like electric kettle, toaster, or iron in the vehicle. It may cause a fire and injury.

- 1. Press the Start/Stop button to the POWER ON position or activate the **Utility Mode**.
  - For more information about the Utility Mode, refer to the 'Setting Utility Mode' section in chapter 6.

2. Open the power outlet cover by sliding it to the left, and connect the power plug of the electric device to the power socket



2C\_V2LPosition

- Time remaining until the battery level reaches the set value, and the distance to empty at the set value appears on the instrument cluster or the infotainment system.
- The indicator on the power outlet indicates power supply status.



2C\_V2LInsideIndicator

Indicator status	Description
Blue	Standby
Red	No power supply even the power outlet is connected.
Green	Normal power supply through the normal connection of the power outlet.

- V2L discharging mode shuts off if the vehicle is off using indoor V2L on the vehicle state of ON.
- Opening the charging door or connecting the V2L connector to the charging inlet, the V2L discharging mode shuts off.
- If you want to use the indoor and outdoor V2L simultaneously, firstly connect the V2L connector to the charging inlet and use the indoor V2L.
- When the high voltage battery charge level reaches the set discharging limit (%), the operation stops, and a warning message appears on the instrument cluster. If you want V2L operation, set the discharging limit (%) lower than the current battery charge.
  - For more information about the discharging limit, refer to the 'Setting a Battery Discharging Limit When Using Vehicle to Load (V2L)' section in chapter 6.
  - For more information about warnings, refer to the 'Warnings and Indicators' section in chapter 4.

## **Solving V2L Problems**

If a problem occurs while using the V2L function, the V2L stops and a related message appears on the instrument cluster.

Message	Cause	Measure
V2L has ended. Battery level has reached the set value.	The high voltage battery level reaches the discharging limit set level.	To use the V2L continuously, make the discharging limit set level lower than the present battery level (For more information, refer to the 'Safety Precautions When Using the V2L Function'.).
V2L stopped due to excessive power use	An electrical appliance that exceeds the maximum power output the vehicle can supply is connected.	Check the total power consumption of the electrical appliance and replace it a product within the V2L maximum power output.
V2L is stopped for the following reasons:  • V2L connector switch off  • V2L connector overheating		Make sure there are no problems with the V2L connector.

## **Aux. Battery Saver+**

The Aux. Battery Saver+ is a function that specialized in battery protection, prevents the failure due to fully discharge of the 12 V battery.

If the user drives or charges the vehicle, the Aux. Battery Saver+ is automatically activated to check the 12 V battery charging state. If necessary, the high voltage battery charges the 12 V battery.



## **MARNING**

When the function is activating, the indicator light illuminates and high voltage electricity flows into the vehicle. Follow the instruction below to prevent electrical shock or injuries.

- Do not touch the high voltage electric wire (orange), connector, and all electric components and devices.
- Do not modify or disconnect any electronic devices in your vehicle.



### CAUTION

The Aux, Battery Saver+ function cannot prevent the 12 V battery discharging in the following situations:

- The 12 V battery is damaged or worn out.
- The 12 V battery is used as a power supply or unauthorized electronic devices are used.

## INFORMATION

- If the Aux. Battery Saver+ function was activated, the high voltage battery level may have decreased
- Depending on the condition of the vehicle or high voltage battery, the Aux. Battery Saver+ function may not operate normally or stopped.

# 6. Driving Your Vehicle

This chapter provides information required to start and drive your vehicle, as well as information that helps you drive more safely and economically.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to your vehicle.
- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

## **Before Driving**

## **Before Entering the Vehicle**

- · Make sure all windows, outside mirror(s), and outside lights are clean and unobstructed.
- Remove frost, snow, or ice from both the front and rear windshield as well as the front side windows.
- · Visually check the tires for uneven wear and damage.
- Check under the vehicle for any sign of leaks.
- Make sure there are no obstacles behind you if you intend to back up.

## **Before Starting**



## WARNING

- To reduce the risk of serious injury or death:
  - Always wear your seat belt. All passengers must be properly belted whenever the vehicle is moving. For more information, refer to the 'Seat Belts' section in chapter 3.
  - Always drive defensively. Do not assume that the other drivers are seeing your vehicle. They may not act as you expect. Be prepared to react to avoid a possible collision. Plan your movements anticipating the 'worst-case' scenario.
  - Stay focused on driving. Driver distraction may cause a collision.
  - Leave plenty of space between you and the vehicle in front of you.
- · Never drink or take drugs while driving.

Drinking or taking drugs while driving is dangerous and may result in a collision, causing serious injury or death.

Drunk driving is the number one contributor to the highway death toll each year. Even a small amount of alcohol can affect your reflexes, perceptions, and judgment. Just one drink may reduce your ability to respond to changing conditions and emergencies and your reaction time gets worse with each additional drink.

Driving while under the influence of drugs is as dangerous or more dangerous than driving under the influence of alcohol.

You are much more likely to have a serious crash if you drink or take drugs while driving. If you are drinking or taking drugs, never drive. Do not ride with a driver who has been drinking or taking drugs. Choose a designated driver or call a taxi.

- Make sure the hood, the liftgate, and the doors are securely closed and locked.
- Adjust the position of the seat and steering wheel.
- · Adjust the inside and side view mirrors.
- · Verify all the lights work.
- Fasten your seat belt. Check that all passengers have fastened their seat belts.
- Check the gauges and indicators in the instrument panel and the messages on the instrument display when the Start/Stop button is in the POWER ON position.
- Check that any items you are carrying are stored properly or fastened down securely.

## **Understanding Your Electric Vehicle**

Electric vehicles are driven using a battery and an electric motor.

#### **Characteristics of Your Electric Vehicle**

- Electric vehicles are eco-friendly because they do not use fossil fuels for driving. Additionally, unlike gasoline vehicles, noise and vibration are minimal, and the vehicle's lifespan is relatively long.
- When slowing down or driving downhill, regenerative braking is used. Regenerative braking charges the high voltage battery and minimizes energy loss.
- If the high voltage battery is running low, you can charge the vehicle using the AC charger, DC charger, or portable charger. For more information, refer to the 'Charging Your Electric Vehicle' section in this chapter.

#### INFORMATION

Regenerative braking uses an electric motor when decelerating and braking, and it transforms kinetic energy to electrical energy in order to charge the high voltage battery.

## Battery information

- High voltage battery (high capacity): Drives the motor and operates the air conditioner and heater. It can be charged via an AC charger, DC charger, or portable charger.
- 12 V battery: Operates all lights, wipers, and audio system. It is automatically charged while the READY indicator is displayed on the instrument cluster or the high voltage battery is charged.

## Main components of your electric vehicle

- On-Board Charger (OBC): Charges the high voltage battery by converting the power grid's AC power to DC power.
- Inverter: Converts power from direct current (DC) to alternating current (AC) and supplies power to the motor, and converts power from AC to DC and charge the high voltage battery during deceleration and braking.
- Low Voltage DC-DC Converter (LDC): Converts the high voltage battery's power source to a low voltage (12 V) power source and supply power to the electrical devices in the vehicle.
- Vehicle Control Unit (VCU): Controls the various controllers and sensors on the vehicle.
- Motor: Uses electricity accumulated in the high voltage battery to drive the vehicle (same role as an engine in gasoline and diesel vehicles).
- Reducer: Delivers the rotational force of the motor to the tires at appropriate speeds and torque.
- High voltage battery (Lithium-ion battery): Stores and supplies power necessary for the electric vehicle to operate.



## WARNING

- Do not remove or disassemble any high voltage battery's connectors and wires. Doing so may lead to accidents, such as electric shock, and result in serious injury and significantly degrade the vehicle's performance and durability.
- · When the high voltage battery or its related components require inspection and maintenance, contact an authorized HYUNDAI dealer.

## Understanding Virtual Engine Sound System (VESS)

Electric vehicles do not use an internal combustion engine, so there is no engine noise while driving. The VESS generates engine sound to make pedestrians aware of the approaching vehicle when driving.

- If the vehicle is in the ready mode and the gear is not in P (Park), the VESS is operated.
- When the gear is shifted to R (Reverse), an additional warning sound will be heard.



## CAUTION

- Be aware that the vehicle does not make engine noise while driving.
- Pay attention to the surrounding environment and drive carefully.
- After parking or waiting for a traffic light, please check around for children, or other obstacles before departure.
- When reversing, check directly behind you before driving. Pedestrians may not be able to recognize vehicle sounds.

## Precautions When Using the High Voltage Battery



## **CAUTION**

- Keep the gauge of the high voltage battery from going below than 10 %. Storing the vehicle while the battery level is low for a long time may damage the battery or reduce the battery's capacity, potentially causing the need for a battery replacement.
- Storing the vehicle in temperatures that are too hot or cold may degrade the battery performance.
- If a collision occurs and the vehicle is impacted, have your vehicle inspected by an authorized HYUNDAI dealer to check the battery connection status.
- Using the V2L function may reduce the driving distance due to the use of the high voltage battery energy, and repeated use of the V2L function may cause a decrease in the life of the high voltage battery.
- Frequent use of DC charging may impact battery life.
- The high voltage battery level may reduce naturally even if the vehicle is not driven.
- If you use the air conditioner or heater, which is powered by the high voltage battery, the distance to empty will be reduced. Maintain reasonable temperature when using the air conditioner or heater to maximize distance to empty.
- · Depending on the vehicle's period of use, natural degradation of the battery may occur that reduces distance to empty over long period of vehicle life. When the charge capacity and distance to empty keep failing, have your vehicle inspected by an authorized HYUNDAI dealer.
- If you do not use the vehicle for a long time, charge the vehicle at least once every three months to prevent both the high voltage and the 12 V battery from fully discharging. When the battery level has low level, immediately charge the vehicle.
- Using AC charging as much as possible can help keep the battery in optimal condition. Fully charging the battery when it is 20 % or lower helps to keep the battery in optimal condition. (Charging once a month or more is recommended.)
- The charging level value displayed on the instrument cluster may decrease according to the charging conditions (charger status, outside temperature, battery temperature, etc.). For longer battery life and safety, after a certain charging level is reached, the charging current is gradually lowered to fully charge the battery.
- The distance to empty or power output may vary depending on the driving conditions, such as the outside temperature. Driving on highway at high speeds or uphill will increase battery consumption, resulting in a shorter distance to empty.

## Other Precautions for Electric Vehicle Management



## **CAUTION**

- When heat treatment after repairs or painting is applied to the vehicle due to an accident, the high voltage battery's performance may be degraded. If heat treatment is required, contact an authorized HYUNDAI dealer.
- · When cleaning the motor compartment, do not use a high-pressure washer. Doing so may result in electric shock, due to a discharge in high voltage electricity, or damage the vehicle's electric system.
- · Do not install third-party parts or modified parts on the vehicle. Doing so may damage the electric power system. Only use or install genuine parts.

## High voltage cut-off switch



High voltage cut-off switch is a device located inside the motor compartment to block the battery's high voltage when your vehicle is inspected at an authorized HYUNDAI

Open the hood and remove the battery service cover on the front trunk to find the high voltage battery cut-off switch.



#### MARNING

- Never touch the high voltage cut-off switch. This could result in serious injury or death in a collision or electric shock.
- · If the high voltage cut-off switch requires an inspection or repair, contact an authorized HYUNDAI dealer.
- Never disconnect or cut the high voltage cut-off switch except in an emergency situation. Serious problems may occur, such as the vehicle may not start.

## **Using Electric Vehicle Functions**

**Electric Vehicle** provides driving information and high voltage battery information. You can set various electric vehicle functions in **Electric Vehicle**.

## **Checking the Electric Vehicle Screen Configuration**



1C\_ElectricVehicleMain

On the Home screen from the infotainment system, select Electric Vehicle.

No.	Name	Description
Ī	(Menu)	You can turn off the screen and check the energy information.
2	You can check the energy consumption and energe economy history.	
િં	(EV charging settings)	You can set the options for various electric vehicle charging.
	Next Departure Time	You can set a scheduled departure time by which charging is complete and the cabin temperature is preconditioned.
	AC charger	You can set the options for AC charger including charging current. For more information, refer to the 'Setting the Options for the AC Charger' section in this chapter.
	Charging Limit	You can set the charging target for fast charging and slow charging. For more information, refer to the

No.	Name	Description
		'Setting the target battery charge level' section in this chapter.
	Electricity Use Settings (V2L)	You can set the battery discharging limit(%) for the high voltage battery for driving. For more information, refer to the 'Setting a battery discharging limit when using Vehicle to Load (V2L)' section in this chapter.
4	(EV settings)	You can set various electric vehicle specialized functions.  • Battery conditioning  • Utility mode  • Charging station For more information, refer to the 'Setting Electric Vehicle Specialized Functions' section in this chapter.

## **Checking Energy Information**

You can check the energy consumption and energy economy history. On the Home screen from the infotainment system, select **Electric Vehicle** > ...

## Checking the energy consumption



1C\_ElectricityUse

On the infotainment screen, select Electricity Use.

• You can check the current energy consumption for each vehicle system.

No.	Name	Description	
1	Drivetrain	Shows the percentage of instantaneous and regenerative energy consumed by the motor to drive the vehicle and the percentage of the power driving system used in total power used since starting the vehicle.	
2	Electronics	Shows the power and energy consumption used by the vehicle system, including the instrument cluster, infotainment system (speaker and	

No.	Name	Description	
		navigation), headlight, vehicle control unit, etc., and the percentage of the power vehicle system used in total power used since starting the vehicle.	
3	Climate	Shows the power and energy consumption used by the air conditioner or heater and the percentage of the power climate system used in total power used since starting the vehicle.	
4	Battery Care	Shows the momentary power consumption used when heating or cooling the battery (Battery Care mode) to maintain optimal battery performance. Also shows the percentage of total energy used for Battery Care mode since starting the vehicle.	

## EV Range History

On the infotainment system, select EV Range History.

- The DRIVE READY shows the driver in real time the predicted drivable distance based on the initial drivable distance and the actual drivable distance during driving to inform the driver the energy efficiency from the start of driving to the present compared to the initial prediction.
- The energy consumption predicted based on the initial drivable distance and the actual energy consumption during driving (Drivetrain/Climate/Electronics/Battery Care) are shown to the driver in real time to show the reason for the difference between the change in drivable distance and the actual drivable distance.
- The entire history of which section consumed the most energy during a single driving cycle is shown to the driver, providing a guidance to the driver on which energy should be saved for efficient driving.



No.	Description	
1	Estimated drivable distance	
2	Actual drivable distance in the current driving	

No.	Description
	(Current driving: From the point of turning on the vehicle to the present)
3	Color-coded legend by energy usage device
4	Actual energy consumption history (Drivetrain/Climate/Electronics/Battery Care)
5	Estimated drivable distance history displayed on the instrument cluster (current driving information displayed)
6	Trend line based on the initial estimated drivable distance (For example: Drivable distance decreases by 1 mi. (1 km) when driving 1 mi. (1 km))
7	Ideal energy consumption guideline based on initial estimated drivable distance
8	0 kWh baseline of energy consumption
9	Energy consumption baseline

## Battery Usage Statistics information

On the infotainment system, select Battery Usage Statistics

For efficient management of the driving (high voltage) battery, you can check
management tips and statistical information such as the charging speed of the driving
(high voltage) battery, the remaining charge while parking, the battery temperature
while driving, and the battery's high output rate.

#### NOTICE

- Battery usage statistics information is a feature that guides you on how to use the driving (high voltage) battery efficiently.
  - If a performance problem occurs, have your vehicle be inspected by an authorized HYUNDAI dealer.
- Performance deterioration may occur due to various reasons other than those displayed in the Battery Usage Statistics.
- The collected information is initialized during the software update.

#### **Battery usage statistics**

Collect the battery usage (high voltage) to provide information and statistics of its usages.

 If the total mileage is more than 1,900 mi. (3,000 km), the battery usage statistics screen will be displayed. However, when updating the battery software, the usage information is initialized and the screen will be re-displayed after collecting additional 1,900 mi. (3,000 km) driving (high voltage) battery usage information.



1C\_BatteryUsageStatisticsInformation

### Battery usage with statistics

Displays the average battery consumption while driving.

#### INFORMATION

If the usage is out of recommendation, it does not seriously affect the battery performance.



1C\_BatteryUsageInformation

### 1. Battery Info.

Displays messages to maintain and manage the performance of high voltage battery.

Message	Description
Battery performance is maintained efficiently.	Displays information on how the high voltage battery is effectively used to manage its efficiency. If more attention is required, a message will be displayed.

Message	Description
	(in case if the lifespan of a battery is effectively managed, the message will also be presented though you are not under the recommended range.)
To maintain battery performance, try AC charging.	Using AC charging rather than DC charging can benefit the lifespan of the high voltage battery.
A habit of smooth driving can help maintain battery performance. Avoid a sudden acceleration and lower the batter output ratio.	Frequent use of high current while driving may undermine the lifespan of a high voltage battery.
Maintaining 50-80 % of charge while parking for long period helps maintain battery performance.	Leaving your vehicle with a high amount of battery unattended may undermine the lifespan of a battery.
Maintain proper battery temperature by avoiding fast charging and high speed driving to maximize battery lifespan and maintain performance.	Frequent use of a high voltage battery under high temperature may undermine the lifespan of a battery.
In order to maintain battery life and performance, it is recommended to use battery conditioning to manage the battery at an appropriate battery temperature.	Frequent use of a high voltage battery under low temperature may undermine the lifespan of a battery.

## 2. Charging Speed

Displays the percentage of DC and AC charge usage.

#### 3. Driving

Shows the ratio of city and high-speed driving at an average speed when driving at a certain period.

Apply to statistics ratio depending on the consumption of a high voltage battery.

#### 4. Battery Consumption

Shows the high output ratio of battery consumption of a high voltage battery used while driving. It is categorized into Low, Medium, and High, depending on the amount of used current.

### 5. Remaining Charge While Parked

After turning off the vehicle, the average amount of remaining high voltage battery after parking is marked as percent (%) under '•' (recommended amount is 50-80 %).

• The ratio may differ by the duration of parking.

### 6. Battery Temperature While Driving

The average temperature of a high voltage battery consumed while driving is shown below '•' (Recommended temperature is 68-95 °F (20-35 °C)).

The ratio may differ by the duration of driving.

## Checking the electric energy economy history



1C\_EVEconomyHistory

On the infotainment screen select, Charge Efficiency History.

 You can check the history of electric energy economy with the date and distance of previous driving.

## **Setting the Next Departure Time**

You can set an anticipated departure time for scheduled charging and target temperature.

#### INFORMATION

- Scheduled charging and climate will be activated based on the departure time.
- The scheduled climate function directly uses the power of the connected charger. It can maintain a pleasant environment and enhance vehicle performance by controlling the temperature of the vehicle and the battery without using the high voltage battery power.
- 1. On the Home screen from the infotainment system, select Electric Vehicle > \ > Next Departure Time.
- 2. Set the anticipated departure schedule.



1C NextDepartureSettings

- 3. Set anticipated time and temperature of the vehicle departure after charging.
- 4. At repeat option, select the day of the week to activate target temperature for the departure time.



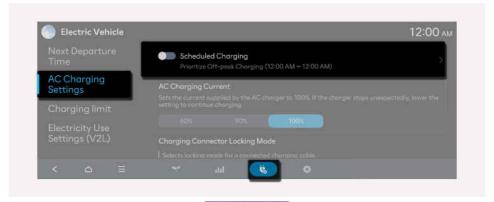
1C\_ScheduledClimate

## **Setting the Options for the AC Charger**

You can set the options for the AC charger including scheduled charging and charging current.

On the Home screen from the infotainment system, select Electric Vehicle > % > AC Charger Settings.

## Setting scheduled charging



1C\_ScheduledClharging

Select Scheduled Charging to turn on the function.



1C ScheduledClharging 2

- · Charge ONLY during Off-peak: Charging is activated only during the off-peak time. It may not be able to reach the target battery charge level.
- Prioritize Off-peak Charging: Charging is activated during the off-peak time. It may keep on charging pass off-peak time to reach the target battery charge level.

For more information about setting the target battery charge level, refer to the 'Setting' the target battery charge level' section in this chapter.

## Setting the charging current



1C\_ACChargingCurrent

Set the charging current when using an AC charger.

## Setting the target battery charge level

You can set the target battery charge level when charged with an AC charger or a DC charger.

· You can check the status of high voltage battery, estimated distance to empty, and the time required for charging the target battery level.

- The distance to empty is estimated based on the energy economy and temperatures. It
  may vary according to your driving style.
- The distance to empty may vary even with the same target level according to changes
  of your driving style.
- 1. On the Home screen from the infotainment system, select **Electric Vehicle** > **%** > **Charging Limit**.
- 2. Set each of the target battery charge level for AC charger and DC charger.
  - The charging level can be changed by 10 %.
  - If the target battery charge level is lower than the current high voltage battery charge level, the battery will not be charged.



1C ChargingLimit

## Setting a Battery Discharging Limit When Using Vehicle to Load (V2L)

Setting battery discharging limit (%) can prevent the battery from discharging when operating home appliances or electronic devices using the high voltage battery.

• For more information about V2L function, refer to the 'Setting a Battery Discharging Limit When Using Vehicle to Load (V2L)' section in this chapter.

#### INFORMATION

V2L is the system that provides AC power using the high voltage battery for driving to operate several electronic devices. You can operate home appliances and electronic devices, or charge another electric vehicle in emergency using the charged electricity from the vehicle's battery while camping or doing other outdoor activities.

- On the Home screen from the infotainment system, select Electric Vehicle > \$\mathbb{k}\$ > Electricity Use Settings (V2L).
- 2. Set the desired battery discharging limit (%).
  - The battery discharging limit can only be set below the current battery charge.
  - When the high voltage battery level reaches the set battery discharging limit, V2L function automatically cuts off electrical supply.



1C ElectricityUseSettingsV2L

## **Setting Electric Vehicle Specialized Functions**

You can set various EV specialized functions such as battery conditioning mode and utility mode.

## Using Battery Conditioning

If the high voltage battery temperature is too high or too low, and there is a risk that the battery's charging performance may deteriorate. The battery conditioning function may be used to ensure DC charging performance as at room temperature. You can manually operate the Battery Conditioning function or automatically operate the function by setting a DC charging station as a destination or a waypoint.

### Manual operation



1C\_BatteryConditioning

**Conditioning** and select **Activate** to use manually.

#### Linked to navigation route

If you set a DC charging station as a destination or waypoint on your navigation, the Battery Conditioning function maintains the battery temperature ideal for DC charging while considering the arrival time. This allows drivers to secure DC charging performance as at room temperature even during hot and cold weather.

- · Battery Conditioning function operates only in a vehicle equipped with a battery heater.
- Battery Conditioning function does not operate to ensure driving distance when the battery charge level is low. The function also does not operate if the temperature of the battery is ideal for charging.
- The charged power used to raise the temperature of a battery may shorten the driving distance. Reaching the optimal temperature of a battery requires time.
- When you are a member of Bluelink, you can control the Battery Conditioning function remotely while parking from the Bluelink app. In this case, the battery conditioning mode will end either when the battery temperature reaches the appropriate range or after 30 minutes. For more information on Bluelink, refer to the separately supplied manual.
- The following symbols appear on the Battery State of Charge (SOC) gauge when the Battery Conditioning function is operating:
  - ttt: The battery is being heated up
  - S: The battery is being cooled down

## Setting Utility Mode

Utility mode allows the high voltage battery to be used instead of the 12 V battery for purposes other than driving.

#### INFORMATION

- You cannot drive the vehicle while the utility mode is activated, and the gear can only be shifted to P (Park).
- You can use every electric device in the vehicle while the utility mode is activated.
- When the utility mode is activated, the Electronic Parking Brake (EPB) is applied automatically. You can release EPB by pressing the EPB switch if necessary.
- 1. Check the operation conditions of the utility mode.
  - Check if the READY indicator is displayed on the instrument cluster.
  - Check if the gear is shifted to P (Park).
- 2. On the Home screen from the infotainment system, select Electric Vehicle> 🌣 > Utility Mode, and then select Activate Utility Mode to activate the function (Utility Mode: ON).



1C UtilityMode

- The READY indicator turns off and the UTIL indicator illuminates on the instrument cluster and the EPB is applied.
- The utility mode can be deactivated by pressing the Start/Stop button to the OFF position.

### INFORMATION

If the utility mode is not activated when the vehicle is in the **READY** mode and the gear is shifted to P (Park), inspect the operation status of EPB.

## Searching for nearby charging stations

You can choose the charging station, the detailed information is provided.

### INFORMATION

When you sign up for HYUNDAI Bluelink service, the available chargers at each charging station appears.

1. On the Home screen from the infotainment system, select Electric Vehicle > ≡ > Charging Station List.



1C\_ChargingStationListMenu

- You can choose among Route, Current Position, Destination, and Favorite.
- The direction (arrow) and distance, charger type, address, and location on the map of the charging stations corresponding to the selected option are displayed on the right side of the screen.



2. Select the charging station on the list and check the detailed information.

# Charging Your Electric Vehicle

Electric vehicles can be charged via an AC charger or DC charger installed at public charging stations or residences.

- If the vehicle cannot be moved to an AC or DC charging station, you can charge the vehicle via the portable charger supplied with the vehicle (In-Cable Control Box (ICCB) with a 120 V Plug).
- To find a nearby public charging station, refer to the 'Searching for nearby charging stations' in this chapter.

## **Safety Precautions for Charging Your Electric Vehicle**

Before charging your electric vehicle, carefully read and follow all the safety information below. Failure to do so may cause electric shock or fire and result in a serious injury, death, vehicle malfunctions, or property damage.

## Precautions for electric medical devices

#### INFORMATION

Certain third party chargers with NACS connectors may not be able to communicate properly with your vehicle due to a difference in communication protocol.

Use the CCS adapter included with your vehicle and the CCS connector on these stations to charge your vehicle.



## WARNING

Electromagnetic waves that are generated from the charger can seriously impact electric medical devices, such as an implantable cardiac pacemaker. When using such devices, make sure to consult with your doctor and the manufacturer to find out whether charging your electric vehicle will impact the operation of your device.

# Basic safety precautions for charging



## MARNING.

- Before charging, apply the Electronic Parking Brake (EPB) with the brake pedal pressed, shift to P (Park) and turn off the vehicle. Movement of the vehicle while charging may result in death, serious injury, or property damage.
- Use UL certified vehicle charger only. Failure to do so may damage the charger, charging cable, or vehicle. Also, it may lead to safety hazards, such as fire, explosion, etc.
- · To avoid death, serious injury, or property damage electric shock and fire, follow the instructions below:
  - Do not touch the interior of the charging connector, charging plug, or the vehicle charging inlet when connecting the cable to the charger and the charging inlet on the vehicle.
  - Do not touch the charging connector and charging plug with wet hands, or when standing in water or snow while connecting the charging cable.
  - When connecting or removing the charging cable, you must hold the charging connector handle and charging plug.
  - Use a waterproof charger. Do not charge the vehicle in a place where rainwater may come in contact with the joints of the charging cable connector and the charging pluq.
  - Ensure there is no water, dust, or other contaminants on the charging cable connector and the charging plug.
  - Immediately stop charging if you notice abnormal conditions, such as odor or smoke.
  - Do not charge the vehicle if there is a risk of lightning.

### INFORMATION

- While charging, the gear cannot be shifted from P (Park) to any other gear.
- · Ensure the vehicle door is unlocked before disconnecting the charging connector. The release button on the charging connector does not work when the vehicle door is locked, or has not been unlocked for an extended period.
- To control the temperature of the high voltage battery while charging or when the battery temperature is high, the air conditioning is used to cool down the battery. It may generate noise or vibration from operation of the air conditioning compressor and cooling fan, but this is a normal condition when charging the high voltage battery.
- The cooling system may be operated when using the air conditioner during charging. This may degrade the air conditioner's performance temporarily.
- Depending on the condition and durability of the high voltage battery, charger specifications and condition, and ambient temperature, the time required for charging the battery and distance to empty may vary.
- In rare cases, you might hear high-frequency noise (a small beeping sound) outside the vehicle when charging with a 400 V DC charger that has deteriorated or has long communication delay. The high-frequency noise can be generated only when the vehicle tries to reduce its own electromagnetic waves to keep DC charging as stable as possible. This beep sound does not affect the charging performance or the vehicle itself.

## Precautions for operating the cooling fan



## MARNING



2C MotorRoomHotCaution

Do not put your hand near the cooling fan in the motor compartment while charging. It may operate automatically to control the battery temperature, even if the vehicle is turned off.

# Precautions for operating the charging door



## CAUTION

- Before opening the charging door in the opening direction, ensure that is no interference with nearby objects when opening or closing the door.
- · When opening and closing the charging door, be careful not to get your hands or other body parts caught in the door.
- If you cannot open the charging door due to freezing weather. In this case, lightly tap or remove any ice near the charging door.
- Do not try to forcibly open the charging door. It may cause damage to the charging door or cause a malfunction.
- Do not hold the parts that support the charging door. Damage to parts or deformation of parts may cause vehicle damage and accidents.

## Precautions for using, handling, and storing the charging cable

Precautions when using the charging cable



### CAUTION

- To prevent electric shock, replace the charging cable if the coating or the connector is damaged.
- Do not modify or disassemble the charging cable. Doing so may result in fire, electric shock, or injury.
- Do not pull or twist the charging cable excessively, and ensure that the cable is not twisted. Power cuts or damage to the cable's insulation sheath may result in electric shock or fire.
- Do not drag the charging cable on the floor or place objects on it. Damage to the insulation of the cable may result in electric shock or fire.
- Do not use the charging cable near heat source or heating appliance.
- Do not drop or subject the charging cable to a strong impact. Also, ensure no water or liquid comes into contact with the cable.
- Use the charging cable only when there are no children around.
- If there is any sign of damage, corrosion, or rust on the charging connector and plug, or if the connection of the charging connector and plug feels loose, do not use the cable. Have your vehicle inspected by an authorized HYUNDAI dealer.

## Precautions when handling and storing the charging cable



## **CAUTION**

- Always keep the charging connector and plug dry and clean.
- · Ensure that the connectors, plugs, and control box (portable charger) of the charging cable are not submerged or in contact with water.
- Keep the charging cable free from water or moisture, and keep it in the cargo storage compartment.
- Do not keep the charging cable near heat source or heating appliances.
- Keep the charging cable away from children.
- If there is dust or contaminants inside the charging connector or plug, remove it using an air gun.
- If the charging cable is contaminated, completely disconnect the cable from the charger or power, and remove the contaminants.
  - Wipe the charging cable lightly with the soft cloth soaked with a 3 % neutral detergent water solution, then use a clean cloth to completely remove moisture and dry the cable in a well-ventilated shade.
  - When removing contaminants, ensure the charging connector and charging plug are not in contact with water.
  - Do not use organic solvents, such as benzene, paint thinner, or strong detergent. Doing so may cause deformation, discoloration, or malfunction of charging cable.
  - When using a vehicle decontamination agent, ensure that the product does not contain organic solvents, such as benzene, paint thinner, or strong detergent.

## **Checking Basic Information on Charging Your Electric Vehicle**

Before charging your vehicle, check and understand the information such as the expected charging time according to the charge type, checking the State of Charge (SOC), and setting the charger lock mode.

# Checking charging type and charging time

The charge types for electric vehicle are as follows:

- AC charge: The electric vehicle is charged via an AC charger at public or private charging stations.
- DC charge: You can charge at high speeds at public charging stations. Refer to the respective company's manual that is provided for each DC charger type.
- Portable charge: If the vehicle cannot be moved to a public charging station due to a lack of battery power, the vehicle can be charged with household electricity, using the 120 V ICCB portable charger included with the vehicle.



- · Risk of electric shock. Do not disconnect under load.
- Suitable for use on a circuit capable of delivering not more than 5,000 rms symmetrical Amperes, 120 V AC Maximum.
- Suitable for use on a circuit capable of delivering not more than 30,000 rms symmetrical Amperes, 1,000 V DC Maximum.
- Battery performance and life may deteriorate if the DC charger is used constantly. It is best to occasionally use AC charger to optimize battery life.
- The electrical outlet at home must comply with regulations and safely accommodate the Voltage, Current (Amps), and Power (Watts) ratings specified on the portable charger. If not, the vehicle may not be charged or safety hazards, such as fire, may occur.
- If the power distributor exceeds its capacity while charging the vehicle with a portable charger at home, the power to home may be cut off or a fire may occur.
- If you use a portable charger to charge your electric vehicle with household electricity, you are charged on your household electricity bill.

### INFORMATION

Type 3R enclosure satisfies the requirements of UL 50E standard when the charging connector is connected to the vehicle side charging inlet. An additional Type 3R enclosure should be provided in the end installation of the vehicle side charging inlet. The **Type 3R** marking can be found on the charging inlet.

 Type 3R enclosure indicates that performance requirement for enclosures intended for outdoor use that provides a degree of protection against falling dirt, rain, sleet, and/or snow.

The estimated charging time for each charging type is as follows:

Charging type		Charging time	Charge level (Minimum - Maximum)	Charging condition (Temperature)
AC charge		About 9 hours 40 minutes	10-100 %	
	350 kW	About 24 minutes	10-80 %	Battery
DC charge	Supercharger V2	About 38 minutes	10-80 %	temperature (77 °F (25 °C))
Portable charge		About 93 hours 10 minutes	10-100 %	

### NOTICE

If the charger is worn out, exposed, or there exists any type of damage, charging may stop for your safety. Use another charger that works normally.

### INFORMATION

- The DC charging time may be longer at cold temperature below 20 °F (-17 °C).
- Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the high voltage battery may vary.
- When charging the battery, an additional 3 minutes may be required to check battery condition.

# Checking the charging status

Inside the charging door



Check the State of Charge (SOC) of the high voltage battery via the charge indicator light inside the charging door with the vehicle door unlocked.

SOC is indicated in 4 levels.

Charge indicator lamp	SOC [%]
	0-24 %
	25-49 %
	50-74 %
	75-100 %

#### On the instrument cluster



2C\_ChargingLevelIndicator

Check the charging state on the instrument cluster to monitor the battery capacity of the high voltage and estimated charging time.

When charging starts, the charging state will be displayed on instrument cluster.

### INFORMATION

- With the vehicle on, the charging state will be displayed continuously.
- When the vehicle is off, the charging state will be displayed for up to 1 minute. The charging state will be displayed continuously when a door is opened.
- When scheduled charging is set, scheduled charging message is displayed.
- When scheduled air conditioner or heater operates while waiting for the scheduled charging, the estimated charging time is displayed as "-".

### Steering wheel

Check the State of Charge (SOC) of the high voltage battery via the charge indicator light middle of the steering wheel.

· SOC is indicated in 4 levels.



Charge indicator lamp	SOC [%]
	0-24 %

Charge indicator lamp	SOC [%]
	25-49 %
	50-74 %
	75-100 %

# Checking information on the charging label



2C\_ChargingLabelLocation



1C\_ChargingLabel

Open the charging door and check the information on the charging label on the right side of the charging connector. The charging label shows safety symbols and the rated input specifications for charging.

No.	Name	Description
1	Warning for high voltage	Indicates a device with a risk of electric shock.
2	Warning/Caution symbol	Indicates a device that may cause property damage, serious injury or death if not operated carefully.

No.	Name	Description
3	Rated voltage and maximum charging current	Indicates the type of input current (~, AC) and the rated voltage range (V) and charging current (A) when AC charging.

## Setting charging connector locking mode

You can lock the charging connector during AC charging to prevent unintended detachment of the charging connector from the vehicle.

On the Home screen from the infotainment system, select Electric Vehicle > % > AC Charging Settings > Charging Connector Locking Mode to set the locking mode of the charging connector.

- Always: Locks the connector automatically whenever the charging connector is plugged into the charging inlet.
- While charging: Locks the connector automatically only while charging is in progress after the charging connector is properly connected to the vehicle.
- Do not lock: The connector unlocks regardless of the state of charging. Press the charging connector release button, disconnect the connector. Be careful to theft of the charging cable.

### INFORMATION

The connector is automatically locked during DC charging or while using the V2L function, regardless of the settings of charging connector locking mode applied to the vehicle.

- When DC charging is complete, the charging connector will be unlocked automatically.
- After using electricity, you can unlock the charging connector by pressing the switch on the V2L connector to turn off the power and unlock the vehicle door.

## Disconnecting the charging connector in an emergency



If the unlock button is not functioning properly due to a discharged battery or abnormal electrical wiring, the charging connector cannot be disconnected from the vehicle.

If the charging connector is not disconnected due to battery being fully discharged or a wiring failure, open the liftgate and pull the emergency cable on the liftgate's right wall. If the charging connector does not disconnect after pulling the emergency cable, have your vehicle inspected by an authorized HYUNDAI dealer.



## CAUTION

Do not disconnect the charging connector forcibly. Doing so may damage the charging connector or the charging inlet on the vehicle.

## **Electric Charging Door**

The driver can open and close the charging door with the following methods:

- When the shift gear is in P (Park), push the charging door to open.
- Push the Close button located inner part of the charging door.



- 1. Charging door to open
- 2. Charging door to close
- Press the charging door button in the instrument panel



· Use the Voice Recognition

### INFORMATION

- The charging door automatically closes when:
  - The charging connector is disconnected
  - The door is opened and the charging connector is not connected for a certain period of time
  - The gear is not in P (Park)
- · After replacing battery (12 V), open and close the charging door once to check that the charging door automatic opening mechanism is functioning properly.

Do not pry on the charging door or use unauthorized tools to open the charging door.

#### NOTICE

- If the charging door does not open or close because ice has formed around it, tap lightly or push on the door to break the ice and release the door.
- Make sure that the charging door is closed before driving the vehicle. If the charging door is opened, mechanical parts of the charging door can be damaged.
- After closing the charging door, be sure to check the warning light is off.
- · After charging the vehicle, close the charging inlet properly. If not, the charging inlet and the charging door can be damaged.
- While washing the vehicle, do not spray high pressure water to the charging door directly. The high pressure can damage the charging door.
- Do not hold the hinge. It may damage the charging door.

## Using an AC Charger

Charge your electric vehicle using an AC charging cable installed in public charging stations or at your professionally installed Level 2 AC home charger.

• To find a nearby public charging station, refer to the 'Using Electric Vehicle Functions' section in this chapter.



## WARNING

Before charging the vehicle, carefully read and follow the instructions in 'Safety Precautions for Charging Your Electric Vehicle' to prevent property damage or injury due to electric shock, fire, explosion, etc.



### CAUTION

To prevent property damage or injury due to fire or explosion, follow the instructions below.

- Only use the genuine AC charging cable provided by the manufacturer (if equipped).
- Do not use an extension cable.
- Check the rated voltage and maximum charging current required for charging, and ensure that the charger power you are using meets the requirements.
- · Immediately stop charging if you discover abnormal conditions, such as odor or smoke.

# Charging with an AC charger

- 1. With the vehicle started, apply the Electronic Parking Brake (EPB) while pressing the brake pedal.
- 2. Turn all switches off, shift to P (Park), and stop the vehicle.
- 3. With the vehicle door unlocked, press the open indicator on the charging door to open the charging door.
- 4. Open the charging inlet cover and check the charging connector and charging inlet for dust or other contaminants.

### 330 Driving Your Vehicle

If there is any dirt or contaminants, remove it using the air gun.



### MARNING.

Do not touch the charging connector of the charging cable or the charging inlet on the vehicle.

- 5. Remove the charging connector protection cap of the AC charging cable, hold the charging connector handle, and connect it to the AC charging inlet on the vehicle. Push it until you hear a "click".
  - When charging starts, the estimated charging time appears on the instrument cluster for about one minute.

### INFORMATION

- If you open the driver's door while charging, the estimated charging time will also be displayed on the instrument cluster for about one minute.
- When scheduled charging is set, a message saying 'Waiting to charge at scheduled time' will be displayed.
- When scheduled air conditioner or heater operates while waiting for the scheduled charging, the estimated charging time will be displayed as '-'.
- 6. Press the release tab on the charging cable handle, then pull it to disconnect it from the vehicle charge port. Hold the charging connector handle, and pull the charging connector to disconnect it from the charging inlet.



# **CAUTION**

Do not forcibly disconnect the charging connector without pressing the unlock button on the charging connector. It may damage the charging connector or the charging inlet on the vehicle.

### INFORMATION

Unlock the driver's door (again if unlocked) if the vehicle is still charging, or if the vehicle Charging Connector Locking Mode is set to always keep it locked.

- 7. Close the charging inlet cover.
- 8. Press the charging door to completely close it.

### INFORMATION

- If the charging connector locking mode is set to Always or While Charging, unlock the door by pressing the button on the smart key or the button on the driver's door, and disconnect the charging connector from the charging inlet.
  - For more information, refer to the 'Setting charging connector locking mode' section in this chapter.
- During AC charging, the quality of radio reception may degrade in some areas.

## Using a DC Charger

If you need to charge the vehicle in a shorter time, you can charge at high speeds using a DC charger installed in public charging stations.

• To find a nearby charging station, refer to the 'Using Electric Vehicle Functions' section in this chapter.



### WARNING

Before charging the vehicle, carefully read and follow the instructions in 'Setting charging connector locking mode' to prevent property damage or injury due to electric shock, fire, explosion, etc.



## CAUTION

Battery performance and life may deteriorate if the DC charger is used constantly. Use AC charging unless DC charging is necessary.

## Charging with a DC charger

- 1. With the vehicle started, apply the Electronic Parking Brake (EPB) while pressing the brake pedal.
- 2. Turn all switches off, shift to P (Park), and stop the vehicle.
- 3. With the vehicle door unlocked, press the open indicator on the charging door to open the charging door.
- 4. Open the charging inlet cover and check the charging connector and charging inlet for dust or other contaminants.
  - If there is any dirt or contaminants, remove it using the air gun.



### MARNING

Do not touch the interior of the charging connector of the charging cable or the charging inlet on the vehicle.

- 5. Remove the charging connector protection cap of the DC charging cable, hold the charging connector handle, and connect it to the DC charging inlet on the vehicle. Push it until vou hear a "click".
  - When charging starts, the estimated charging time appears on the instrument cluster for about one minute.

### INFORMATION

If you open the driver's door while charging, the estimated charging time will also be displayed on the instrument cluster for a minute.

- 6. When charging is complete, hold the charging connector handle and pull out the charging connector to disconnect it from the charging inlet.
  - · Depending on the DC charger types, some DC chargers may not have a charger connector unlock button.

Before disconnecting the charging connector, check if there is an unlock button on the connector handle. If the connector handle is equipped with an unlock button, forcibly disconnecting the connector without pressing the button may damage the charging connector or charging inlet on the vehicle.

INFORMATION

For more information, refer to the 'Setting charging connector locking mode' section in this chapter.

- 7. Close the charging inlet cover.
- 8. Press the charging door to completely close it.

## **Using the CCS Adapter**

## Adapter Specifications





CCS1 AC Adapter



		CCS1 DC	CCS1 AC
Performance	Туре	DC Adapter	AC Adapter

		CCS1 DC	CCS1 AC
	Rated Voltage	1,000 VDC	250 VAC
	Rated Current	350 ADC at 95 °F (35 °C) Boost Current: 400 A for 10 min	80 A
	Maximum Current	400 ADC	80 A
	Insulation Resistance	100 Mohm or above	100 Mohm or above
	Dimensions	4.7 x 3.0 x 5.5 in (120 x 75 x 140 mm)	2.4 x 2.4 x 4.3 in (61 x 61 x 109 mm)
Technical Specifications	Exterior Material	Polycarbonate	Polycarbonate
	Terminal Material	Copper – Silver Plated	Copper – Silver Plated
	Operating Temperature	-22 °F to 122 °F (-30 °C to 50 °C)	-22 °F to 122 °F (-30 °C to 50 °C)
Environmental Specifications	Waterproof Rating	TYPE 3R (Equivalent to IP67)	TYPE 3R (Equivalent to IP67)
	International Standard	UL2251	UL2251

# Using the CCS1 DC Adapter

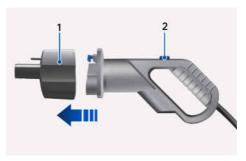


# **MARNING**

Before using the CCS1 DC Adapter, carefully read and obey the following precautions. Failure to follow the safety warnings and instructions can lead to fire, electric shock, serious injury or death.

### Connecting the adapter

1. Press the latch on the CCS1 DC charger and connect the adapter to the charging connector.



- 1. Adapter
- 2. Latch
- 2. Connect the CCS1 DC Adapter to the vehicle charging inlet, and check if the charging connector is properly connected.



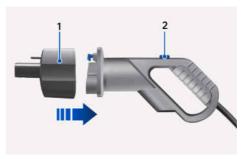
3. Charge the vehicle by following the procedures in the 'Charging with a DC charger' section in this chapter.

## Disconnecting the adapter

1. After charging is complete, unlock the vehicle charging connector by following the procedures in the 'Setting charging connector locking mode' section in this chapter. 2. Disconnect the adapter from the vehicle charging inlet.



3. Press the latch on the charging connector and pull the charging connector to remove the adapter.



- 1. Adapter
- 2. Latch
- 4. Plug the charging connector into the station.
- 5. Store the CCS1 DC Adapter in the vehicle.

Storing and maintaining the adapter

- Always store the charging adapter in its designated case or pouch to prevent loss and damage.
- Wipe the charging adapter lightly with a soft cloth before or after using the adapter. Dirt or contaminants on the adapter may affect charging conditions.
- Always keep the charging adapter in dry conditions. Corrosion or damage may occur if the adapter is stored in wet environments.
- When storing the charging adapter inside the vehicle, make sure it is properly secured to avoid damage.
- Do not use the CCS1 DC Adapter on an AC charger.

### INFORMATION

The adapter is equipped with a thermal cut-off function with two stages.

- · Stage 1: If the charge port temperature approaches the limit due to the high current, the charging current will be reduced.
- · Stage 2: If the temperature continues to increase after the initial overheating, the charging current will be cut off completely.



### MARNING

Only use a Hyundai genuine adapter on Hyundai vehicles. The CCS1 DC Adapter was designed specifically for Hyundai vehicles. Using the adapter on vehicles other than Hyundai may cause overheating, decreased charging speed, or damage to the vehicle or adapter.

## Using the CCS1 AC Adapter



## WARNING

Before using the CCS1 AC Adapter, carefully read and obey the following precautions. Failure to follow the safety warnings and instructions can lead to fire, electric shock, serious injury or death.

## Connecting the adapter

1. Press the latch on the CCS1 AC charger and connect the adapter to the charging connector.



- 1. Latch
- 2. Adapter

2. Connect the CCS1 AC Adapter to the vehicle charging inlet, and check if the charging connector is properly connected.



Charge the vehicle by following the procedures in the 'Charging with an AC charger' section in this chapter.

## Disconnecting the adapter

- 1. After charging is complete, unlock the vehicle charging connector by following the procedures in the 'Setting charging connector locking mode' section in this chapter.
- 2. Disconnect the adapter from the vehicle charging inlet.



3. Press the latch on the charging connector and pull the charging connector to remove the adapter.



- 1. Latch
- 2. Adapter

4. Store the CCS1 AC Adapter in the vehicle.

Storing and maintaining the adapter

- Always store the charging adapter in its designated case or pouch to prevent loss and damage.
- Wipe the charging adapter lightly with a soft cloth before or after using the adapter. Dirt or contaminants on the adapter may affect charging conditions.
- Always keep the charging adapter in dry conditions. Corrosion or damage may occur if the adapter is stored in wet environments.
- When storing the charging adapter inside the vehicle, make sure it is properly secured to avoid damage.

## Precautions when using the CCS1 DC/AC Adapter



## MARNING.

Before using the CCS1 DC/AC Adapter, carefully read and obey the following precautions. Failure to follow the safety warnings and instructions can lead to fire, electric shock, serious injury or death.

- The CCS1 DC/AC Adapter is designed only for vehicle charging. Do not use the adapter for purposes other than charging the vehicle. Do not use the charging adapter to charge another vehicle, or with any other materials.
- · Do not use the adapter if there are any signs of malfunction, crack, abrasion, damage or if the adapter is malfunctioning.
- Do not modify or disassemble the adapter.
- Do not disconnect the adapter or charging cable forcibly from the vehicle when charging.
- Before driving, always make sure the adapter is properly disconnected from the vehicle.
- Always keep the adapter free from water or moisture, and dirt. Do not use the adapter if the adapter is damaged or corroded.
- · Do not let any sharp metallic objects such as wires, tools. or needles touch the adapter socket.
- Do not damage the adapter with sharp objects.
- Keep contaminants away from any part of the adapter.
- · Do not let the charging connector/cable and the adapter cause a disturbance to other pedestrians, vehicles or materials.
- The adapter may affect or damage nearby electric medical devices. For more information about the affects the adapter may cause to electric medical devices, contact an authorized HYUNDAI dealer.
- · Do not clean the adapter using detergent.
- · Always connect the adapter to the charging connector first before connecting to the vehicle. When disconnecting, disconnect charging connector and adapter first, and then remove the adapter from the charging connector.
- · Do not use the CCS Adapter on an AC charger.
- · Only used for chargers and vehicles that are compatible with proper voltage and current. Using other manufacturers' products may cause safety issues such as charging interruption, overload of current/voltage which can cause fire, burn, and exposure to a high voltage.
- Do not put your finger into the adapter.



### MARNING

Do not operate or store the CCS1 DC/AC Adapter out of the following temperature:

- Operating temperature: -22 °F to +122 °F (-30 °C to +50 °C)
- Storage temperature: -40 °F to +185 °F (-40 °C to +85 °C)

## Using a Portable Charger (ICCB)

If the vehicle cannot be moved to a public charging station, you can charge the vehicle using a separately purchased In-Cable Control Box (ICCB) in places where general power (AC 120 V) is supplied.



### WARNING

Before charging the vehicle, carefully read and follow the instructions in 'Setting charging connector locking mode' to prevent property damage or injury due to electric shock, fire. explosion, etc.



### CAUTION

To prevent property damage or injury due to fire or explosion, follow the instructions below.

- Only use a genuine HYUNDAI portable charger (if equipped).
- Do not let children operate or touch the portable charger. Doing so may lead to unexpected accidents.
- · Try to avoid using an extension cord, but if you must use to reach a 120 V outlet, ensure it is a medium to heavy duty grounded extension cord rated at 15 A minimum.
- The charger power you are using must comply with regulations and safely accommodate the Voltage, Current (Amps), and Power (Watts) ratings. If not, the vehicle may not be charged or safety hazards, such as fire, may occur.
- If the power distributor exceeds its capacity while charging the vehicle with a portable charger at home, the power to the home may be cut off or a fire may occur.
- Immediately stop charging if you discover abnormal conditions, such as odor or smoke.
- If you charge the vehicle with household electricity, you are charged electricity bill according to the home rate system, not the electric vehicle rate system.

# Understanding portable chargers



2C ICCBCharger

- 1. Control box
- 2. Power plug
- 3. Charging connector

Icon	Name	Color	Description
=CII: PCJAEF	POWER	Green	Turns on when the power is on.
[4] CHARGE	CHARGE	Blue	Turns on while charging and blinks when current is limited (Forcibly switched to 6 A).
That.T	FAULT	Red	Blinks when a leakage current, communication error, or overcurrent error occurs, or when the high-temperature protection inside the plug and charger is activated.
88.	CHARGE LEVEL	-	Displays the present charging current setting (6 A, 8 A, 10 A, or 12 A).

- If an error occurs, you can reset the portable charger by disconnecting and reconnecting the power plug, and then pressing the button on the control box for more than two seconds.
- If the same symptom repeats after resetting the portable charger, have your vehicle inspected by an authorized HYUNDAI dealer.
- If there is no status change for more than one minute, the portable charger will be switched to power saving mode, and the display light will be turned off.

# Charging with a portable charger

- 1. Connect the power plug of the portable charger to the electrical outlet at your home.
  - · When connected, the power indicator light will turn green.
  - The power indicator light on the control box will turn green.

### INFORMATION

- Select a circuit that is not shared with other devices for the best performance.
   Additional devices may cause the circuit breaker to trip.
- Adjust the charge current to a lower level if there are other devices on the same circuit, or the circuit breaker has tripped.
- If desired, set the charging current by pressing the button on the back of the control box for more than two seconds until the number on the charging current indicator blinks.

### NOTICE

An example of a portable charger charging current setting suitable for the rated current of the power supplied is as follows. However, the appropriate charging current may vary depending on the environment, such as the power usage inside the building.

Outlet Current	ICCB Charge level
14-16 A	12 A
12-13 A	10 A
10-11 A	8 A
8-9 A	6 A

- The charging current is changed each time the button is pressed, in the order of 6 A
   8 A 10 A 12 A.
- If 10 seconds have passed without pressing any button, the blinking will stop and the charging current will be finished.
- 3. With the vehicle on, apply the Electronic Parking Brake (EPB) while pressing the brake pedal.
- 4. Turn all switches off, shift to P (Park), and turn off the vehicle.
- 5. With the vehicle door unlocked, press the open indicator on the charging door to open the charging door.
- Open the charging inlet cover and check the charging connector and charging inlet for dust or other contaminants.
  - If there is any dirt or contaminants, remove it using the air gun.



### WARNING

Do not touch the charging connector of the charging cable or the charging inlet of the vehicle.

- 7. Remove the charging connector protection cap of the portable charging cable, hold the charging connector handle, and connect it to the AC charging inlet of the vehicle. Push it until you hear a "click".
  - When charging starts, the estimated charging time appears on the instrument cluster for about one minute.

### INFORMATION

- If you open the driver's door while charging, the estimated charging time will also be displayed on the instrument cluster for about one minute.
- When scheduled charging is set, a message saying 'Waiting to charge at scheduled time' will be displayed.
- When scheduled air conditioner or heater operates while waiting for the scheduled charging, the estimated charging time will be displayed as '-'.

8. When charging is complete, hold the charging connector handle with the unlock button pressed and pull on the charging connector to disconnect it from the charging inlet.

### INFORMATION

If you have set the charging connector locking mode as **Always** or **While charging**, unlock the door by pressing the button on the smart key or the button on the driver's door, and disconnect the charging connector from the charging inlet.

- For more information, refer to the 'Setting charging connector locking mode' section in this chapter.
- 9. Close the charging inlet cover.
- 10. Press the charging door to completely close it.

## Using the scheduled charging function

The scheduled charging function allows you to charge your vehicle using low-cost, latenight power until the next departure time.

On the Home screen of the infotainment system, select **Electric Vehicle** > **4** > **AC Charger** > **Scheduled Charging**.

- For more information, refer to the 'Using Electric Vehicle Functions' section in this chapter.
- When scheduled charging is set and the AC charger or the portable charger (ICCB) is connected for charging, the indicator light gradually illuminates for three minutes to indicate that scheduled charging is set.
- When scheduled charging is set, charging is not started immediately when the AC charger or portable charger (ICCB) is connected. To charge the vehicle immediately, open the charging door and press the ♣a button or select Electric Vehicle > ♣ > AC Charger > Scheduled Charging on the screen and deactivate the scheduled charge setting.

### INFORMATION

- You can use the scheduled charging function only when using an AC charger or the
  portable charger (ICCB). For more information about connecting an AC charger and
  portable charger, refer to the 'Using an AC Charger' and 'Using a Portable Charger
  (ICCB)' section in this chapter.
- You can set up or cancel scheduled charging using the HYUNDAI Bluelink app on your smartphone. For more information, refer to the infotainment system manual.
- Charging may start immediately after a charger is connected to the vehicle, depending
  on the charging time calculated when setting up the scheduled charging.

# **Stopping Charging Immediately**

- 1. Press the door lock or unlock button of the vehicle.
- 2. Within 15 seconds press the & button.

## Checklist when charging does not start

- Check the scheduled charging setting. If the scheduled charging is set, charging is not started after connecting an AC charger or portable charger to the vehicle until the setting conditions are met.
- Check the operation status of the charger. Actual method for indicating the operation status may vary in accordance with the charger manufacturer.
- If a warning sign related to charging appears on the instrument cluster, check its message.
- If the charging connector and charging inlet are not connected properly or not fully seated, the connector may droop or vibrate. In this case, hold the charging connector handle and push it all the way in.
- Check the charging status by connecting another charger that has been approved for proper operation.
  - If the vehicle is charged normally using another charger, contact the charger manufacturer for a solution.
  - If the vehicle is not charged even when using another charger, have your vehicle inspected by an authorized HYUNDAI dealer.

# Start/Stop Button



Whenever the front door is opened, the Start/Stop button illuminates and goes off for a few minutes after the door is closed.



### WARNING

- To turn the vehicle off in an emergency:
  - Press and hold the Start/Stop button for more than 2 seconds or rapidly press and release the Start/Stop button 3 times (within 3 seconds).
  - If the vehicle is still moving, you can restart the vehicle without depressing the brake pedal by pressing the Start/Stop button with the gear in the N (Neutral) position.
- Never press the Start/Stop button while the vehicle is in motion except in an emergency. This may result in the vehicle turning off and loss of power assist for the steering and brake systems. This may cause loss of directional control and braking function, which could cause a collision.
- Before leaving the driver's seat, always make sure the gear is in the P (Park) position, apply the parking brake, press the Start/Stop button to the OFF position, and take the smart key with you. Unexpected vehicle movement may occur if these precautions are not followed.
- Never reach through the steering wheel for the Start/Stop button or any other control while the vehicle is moving. The presence of your hand or arm in this area may cause a loss of vehicle control resulting in a collision.

## Start/Stop button positions

Button Position	Action	Notes
OFF	To turn off the vehicle, press the Start/ Stop button with the vehicle shifted to P (Park). If the Start/Stop button is pressed with the vehicle shifted to D (Drive), R (Reverse), or N (Neutral), the gear automatically shifts to P (Park). The steering wheel locks to protect the vehicle from theft (if equipped).	If the steering wheel is not locked properly when you open the driver's door, the warning chime will sound.
POWER ON	Press the Start/Stop button while it is in the OFF position without depressing the brake pedal.  The warning lights can be checked before the vehicle is started.	<ul> <li>In 14 minutes after POWER ON, the infotainment system screen shows the message. To continue to use the vehicle power, press 'Start utility mode'.</li> <li>If POWER ON is maintained for 15 minutes without converting to the utility mode, the power is turned OFF.</li> </ul>
DRIVE READY	To start the vehicle, depress the brake pedal and press the Start/Stop button with the gear shifted to the P (Park) position.	If you press the Start/Stop button without depressing the brake pedal, the vehicle does not start and the Start/Stop button changes as follows:  OFF → POWER ON → OFF

### INFORMATION

To prevent vehicle battery discharge, the Start/Stop button changes to the OFF position when the Start/Stop button is in the POWER ON position with the gear in P (Park) for a certain period of time depending on the battery condition. When the function operates, the tail lights will turn off. To use the tail lights again, turn the headlights switch located on the steering column to the OFF and ON position again.

# Starting the vehicle

- 1. Carry the smart key or leave it inside the vehicle.
- 2. Make sure the gear is in P (Park). Press the Start/Stop button while depressing the brake pedal.
  - If the **READY** indicator does not illuminate, start the vehicle again.
- 3. Depress and hold the brake pedal and shift to the desired position.
- 4. Release the parking brake and slowly release the brake pedal. Check if the vehicle slowly moves forward, then depress the accelerator pedal.



## WARNING

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes such as high heels, ski boots, sandals, and flip-flops may interfere with your ability to use the brake and accelerator. Do not drive barefoot.
- · Do not start your vehicle with the accelerator pedal depressed. Place your foot firmly on the brake pedal while starting your vehicle.



### A CAUTION

- Always fasten the seat belt before starting the vehicle for safety.
- Check if the Electronic Parking Brake (EPB) is applied before starting the vehicle.

#### NOTICE

• The vehicle enters the ready mode (READY indicator on) if you get in the vehicle with a smart key or digital key (UWB-supported smartphone) while scheduled climate or remote climate control is operating.

The vehicle also enters the ready mode if you get in the vehicle and place the NFC digital key on the vehicle authentication pad (wireless charging pad), and then close the door or depress the brake pedal.

If a smart key or digital key (if equipped) is not detected in the vehicle after the door is closed or the brake pedal is depressed, a warning message appears.

When the vehicle is in the ready mode, be careful as the vehicle may move when shifting the gear from P (Park) to another gear position.

To prevent damage to the vehicle:

• Do not press the Start/Stop button for more than 10 seconds except when the brake switch fuse is blown.

When the stop light fuse is blown, replace the fuse. If you cannot replace the fuse, start the vehicle by pressing and holding the Start/Stop Button for 10 seconds with the Start/Stop button in the OFF position.

Pressing the brake pedal many times while READY indicator light is off will increase the possibility of discharging the 12 V battery.

For your safety always depress the brake pedal before starting the vehicle.

- If the READY indicator turns off while you are in motion, do not attempt to shift the gear to the P (Park) position. If traffic and road conditions permit, you may put the gear in N (Neutral) while the vehicle is still moving and press the Start/Stop button in an attempt to restart the vehicle.
- Do not push or tow your vehicle to start the vehicle.

### INFORMATION

- The vehicle starts by pressing the Start/Stop button, only when the smart key is in the vehicle.
- The vehicle may not start even if the smart key is in the vehicle but it is not near you (for example, in the cargo area).
- When the Start/Stop button is in the POWER ON position, if any door is open, the system checks for the smart key. When the smart key is not in the vehicle, the indicator blinks and the warning '**Key not in vehicle**' appears. When all doors are closed, the chime also sounds for a few seconds. Keep the smart key in the vehicle when in the POWER ON position or if the vehicle is in the ready mode (READY indicator ON).

If the smart key battery is weak or the smart key does not work correctly



If the vehicle does not start due to a dead smart key battery or radio interference, place the smart key in the emergency start symbol position located in the center console open tray.

# Stopping the vehicle

- 1. Hold down the brake pedal and shift the gear to P (Park).
- 2. Apply the parking brake.
- 3. Press the Start/Stop button and turn off the vehicle while depressing the brake pedal.

### INFORMATION

Take the key with you when you leave the vehicle.

### Remote start



2C\_SmartKeyRemoteStartButton

- 1. Press the Door Lock ⊕ button within 32 ft. (10 m) from the vehicle.
- 2. Press and hold the Remote Start 🔐 button for over 2 seconds within 4 seconds.

To turn off the vehicle, press the Remote Start no button once.

### NOTICE

- The vehicle does not remotely start if the hood or liftgate is open.
- The vehicle must be in P (Park).
- The vehicle turns off if you get in the vehicle without a registered smart key or you do not get in the vehicle within 10 minutes.

# Vehicle Auto-Shut Off

## f Equipped

If you forget to turn off the vehicle that EV Drivable for a period of time, vehicle shuts off automatically to prevent waste of the electric power.

## **Operating Conditions**

Vehicle Auto-Shut Off timer operates when all the following conditions are satisfied:

- Vehicle speed is below 1.8 mph (3 km/h), and the gear is shifted to P (Park)
- The brake pedal and accelerator pedal are not depressed
- · The driver's seat belt is unfastened
- The passenger seat is empty

## **Deactivating Conditions**

Vehicle Auto-Shut Off timer turns off when one of the situation occurs:

- Vehicle speed is above 1.8 mph (3 km/h)
- The gear is shifted to R (Reverse), D (Drive) or N (Neutral)
- The brake pedal or accelerator pedal is depressed
- · The driver's seat belt is fastened
- · A passenger is in the passenger's seat

## **System Operation**



When all the conditions are satisfied, the Vehicle Auto-Shut Off operates and turns the vehicle off automatically after 60 minutes.

A timer appears on the cluster display 30 minutes before vehicle shuts off.

# Resetting cluster timer

To reset the cluster timer, do one of followings:

- Release the accelerator pedal or brake pedal after Vehicle Auto-Shut Off is complete.
- Press the **OK** button on the steering wheel while the timer appears on the cluster display.



Do not leave a passenger or a pet in the vehicle in hot weather since the air conditioning system turns off when the vehicle is off.

# **Gear Shifting**



- 1. Rotary gear shift dial
- 2. P button

# **Gear Shift Operation**

To change the gear, depress the brake pedal and rotate the rotary gear shift dial.



### MARNING

To reduce the risk of serious injury or death:

- · Always check the surrounding areas near your vehicle for people, especially children, before shifting a vehicle into D (Drive) or R (Reverse).
- Before leaving the driver's seat, always make sure the vehicle is shifted to the P (Park) position, then apply the parking brake, then press the Start/Stop button to the OFF position. Unexpected and sudden vehicle movement can occur if these precautions are not followed.

# Rotary shifter/Rotary gear shift dial

P (Park)



Always come to a complete stop before shifting into P (Park).

To shift the gear to P (Park), press the P button while depressing the brake pedal.



# WARNING

- Shifting into P (Park) while the vehicle is moving may cause you to lose control of the vehicle.
- · When parking on an incline, shift the gear to P (Park), apply the parking brake, and turn the wheels toward the curb to prevent the vehicle from rolling downhill.
- Do not use the P (Park) position instead of the parking brake.

#### INFORMATION

For vehicles equipped with the Electronic Parking Brake (EPB), EPB applies automatically when the gear is shifted to P (Park).

### Automatic gear shift to P (Park)

The gear is shifted to P (Park) automatically for safety reasons under the following conditions:

- When the vehicle is turned off with the gear in R (Reverse), D (Drive) or N (Neutral).
- When the driver's door is open with the vehicle running, the gear in R (Reverse), D (Drive) or N (Neutral) and the vehicle at a standstill.
  - If the vehicle is moving in R (Reverse) or D (Drive) and the driver's door is opened and the driver's seat belt is unfastened, the gear may not shift to P (Park) automatically to prevent reducer gear damage.
- When the driver's door is open with the gear in N (Neutral) and the vehicle is off.



### CAUTION

In situations the gear must be in P (Park), always check if the gear is shifted to P (Park) by checking the instrument cluster.

#### Parking

Always come to a complete stop and continue to depress the brake pedal. Shift the gear to P (Park), apply the EPB, and press the Start/Stop button to the OFF position. Take the key with you when leaving the vehicle.

### R (Reverse)



2C ShiftButtonRPosition

Use this position to drive the vehicle rearward.

To shift the gear to R (Rear), rotate the rotary gear shift dial to R (Reverse) while depressing the brake pedal.

The direction of the rotary gear shift dial is the same as that of the wheel.

## NOTICE

Always come to a complete stop before shifting into or out of R (Reverse) to prevent damaging the reducer.

#### N (Neutral)



To shift the gear to N (Neutral), rotate the rotary gear shift dial to N (Neutral) while depressing the brake pedal.

Always depress the brake pedal when you are shifting from N (Neutral) to another gear.

#### INFORMATION

When the EPB is applied, press the EPB switch while depressing the brake pedal. The EPB must be released manually because EPB does not release automatically even though the gear is shifted to N (Neutral).



### MARNING

Do not shift gears unless your foot is firmly on the brake pedal.



# CAUTION

The vehicle can be started with the gear in N (Neutral), but for your safety, be sure to start the vehicle with the gear in P (Park).

#### D (Drive)



To shift the gear to D (Drive), rotate the rotary gear shift dial to D (Drive) while depressing the brake pedal.

The PE system (Power Electric system) automatically activates the regenerative braking system according to the road conditions.

#### INFORMATION

PE system refers to moter + inverter + reducer.



### CAUTION

When you start after stopping on a steep incline, even if the gear is in D (Drive), if you do not depress the accelerator or brake pedal, the vehicle may roll backwards, which can cause an accident.

#### NOTICE

Always come to a complete stop before shifting into D (Drive) to prevent reducer damage.

# Shift-lock system

For your safety, your vehicle has a shift-lock system which prevents shifting the gear from P (Park) or N (Neutral) into R (Reverse) or D (Drive) unless the brake pedal is depressed.

With the vehicle on, shift from P (Park) or N (Neutral) into R (Reverse) or D (Drive) while depressing the brake pedal.

#### NOTICE

The gear cannot be shifted while the charging cable is connected.

# When the battery (12 V) is discharged

You cannot shift the gears when the battery is discharged.

Jump start your vehicle. Refer to the 'In Case of Vehicle Malfunction' section in chapter 8 or contact an authorized HYUNDAI dealer.

# **Cluster Display Messages**

# Press brake pedal to change gear

This message is displayed when the brake pedal is not depressed while shifting the gear. Depress the brake pedal and then shift the gear.

# Shift to Pafter stopping

This message is displayed when the gear is shifted to P (Park) while the vehicle is moving. Stop the vehicle before shifting to P (Park).

# This gear is already selected

This message is displayed when the currently selected shift gear is selected again.

#### Check P button

This message is displayed when there is a problem with the P (Park) button.

If this message is displayed when the button is not pressed, have your vehicle inspected by an authorized HYUNDAI dealer.

# Shifter system malfunction

This message is displayed when there is a malfunction with the rotary gear shift dial. Have your vehicle inspected by an authorized HYUNDAI dealer.

### Check shifter dial

This message is displayed when there is a malfunction with the rotary gear shift dial. Have your vehicle inspected by an authorized HYUNDAI dealer.

# Rotary shifter stuck

This message is displayed when the rotary gear shift dial does not return back to it's normal position after rotating it.

Have your vehicle inspected by an authorized HYUNDAI dealer.

# **Good Driving Practices**

- Never shift the gear from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never shift the gear into P (Park) when the vehicle is moving.
   Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Do not shift the gear to N (Neutral) when driving. If the gear is shifted to N (Neutral) while driving. Doing so may increase the risk of an accident.
  - Also, shift the gear back to D (Drive) while the vehicle is moving may severely damage the reducer.
- When driving uphill or downhill, always shift to D (Drive) for driving forward or shift to R
  (Reverse) for driving rearwards. After selecting D (Drive) or R (Reverse), check the gear
  position indicated on the instrument cluster before driving. If the vehicle moves in the
  opposite direction of the selected gear, the vehicle may turn off and a serious accident
  might occur due to degraded brake performance.

- Do not drive with your foot resting on the brake pedal. Even light, but consistent pedal pressure can result in the brakes overheating, brake wear and possibly even brake failure.
- · Always apply the parking brake when leaving the vehicle. Do not depend on placing the shift gear in P (Park) to keep the vehicle from moving.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and may cause loss of vehicle control resulting in an accident.
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator.



## MARNING

To reduce the risk of SERIOUS INJURY or DEATH:

- ALWAYS wear your seat belt. In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- · The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver over steers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.
- HYUNDAI Vehicle recommends you to follow all posted speed limits.

# Regenerative Braking System (Paddle Shifter)

Regenerative braking system operates the paddle shifter to control the regenerative braking intensity of the vehicle. It improves the energy efficiency of the vehicle and helps the driver to have a better driving experience.

INFORMATION

The regenerative braking system uses the electric motor to engage the brake. The electric motor converts the kinetic energy generated from decelerating the vehicle to electricity and charges the high voltage battery.

# **Using Regenerative Braking System**

# Operating paddle shifter



- 1. Regenerative braking increase lever (±19)
- 2. Regenerative braking decrease lever (19)
- Pull the left paddle shifter \_+@ once to raise the regenerative braking intensity level by 1. It increases decelerating intensity.
- Pull the right paddle shifter 
   Once to lower the regenerative braking intensity level by

   It decreases decelerating intensity.
- While the smart regeneration system is turned ON: Pull and hold the right paddle shifter 
   of rover 1 second to turn off the smart regeneration system. (For more information, refer to the 'Smart Regeneration System' section in this chapter.)
- While the smart regeneration system is OFF: Pull and hold the right paddle shifter for over 1 second to turn on the smart regeneration system. The regenerative braking level appears as AUTO.
- Pull and hold the left paddle shifter <u>+•</u> for over 0.5 seconds to keep raising the regenerative braking intensity level. Keep holding the paddle shifter stops the vehicle (For more information, refer to the 'One Pedal Driving' section in this chapter.).

# Checking the regenerative braking level



2C RegenerationBrakeLevelInfo

The selected regenerative braking level appears on the instrument cluster. When the vehicle is turned off and on again after the regenerative braking level is lowered to 0, the braking level changes to 1.

## **Regenerative Braking System Limitations**

Regenerative braking intensity cannot be changed using the paddle shifter in the following situations:

- When the both paddle shifters are pulled at the same time
- When the vehicle is decelerating by depressing the brake pedal
- · When Smart Cruise Control is activated
- · When regenerative braking is continuously operated with the battery fully charged

# Adjustable range according to drive mode

Initial setting of the regenerative braking level and adjustable range vary according to the selected Drive mode.

Drive mode	Adjustable Range
SNOW	0 to 1
ECO	0 to 3
NORMAL	0 to 3
SPORT	0 to 3

For more information, refer to the 'Drive Mode Integrated Control System' section in this chapter.

# **One Pedal Driving**

One pedal driving operates the paddle shifter while coasting to control the intensity of regenerative braking. It assists the driver to stop the vehicle without depressing the brake pedal.

#### INFORMATION

Coasting is the process of driving a vehicle without the brake pedal and the accelerator depressed. Coasting uses the inertia of driving energy instead of the vehicle power.

# Using one pedal driving

Pull and hold the left paddle shifter +0 for over 0.5 seconds while coasting to enable the one pedal driving mode.

- Release the paddle shifter when the vehicle speed is above 2 mph (3 km/h) to return to the previously set regenerative braking level.
- If the vehicle speed is below 2 mph (3 km/h), the vehicle will keep engaging the brake although the driver releases the paddle shifter.
- · Releasing the paddle shifter after the vehicle comes to a stop maintain the vehicle stationary.



# **CAUTION**

- The vehicle may not come to a stop although the one pedal driving function is active, depending on the condition of the vehicle and the road. Check the surroundings and depress the brake pedal to decelerate.
- If the driver depresses the accelerator while pulling and holding the left paddle shifter +1 to increase the braking level, one pedal driving function will work like i-PEDAL function. In this case, the vehicle speed is no longer controllable through the paddle shifter.

# One pedal driving limitations

In the following conditions, the vehicle may not come to a stop although the one pedal driving function is active. Depress the brake pedal to stop the vehicle.

- When driving on a slope, or when the vehicle is repeatedly driven and stopped
- When the vehicle is driving through the end of the slope
- When driving on a slippery surface such as an icy, rainy, or muddy road
- When the wheels are not properly aligned
- When a wheel slip or wheel spin occurs
- When the weight on board is too heavy
- · When the vehicle is tilted to one side
- · When the tire is worn out too much

# Automatic engagement of EPB

Use one pedal driving function to bring the vehicle to a stop and automatically engage the Electronic Parking Brake (EPB).

After the vehicle is stopped, EPB is automatically engaged when any of the following conditions are satisfied:

- The driver's seatbelt is unfastened and the driver's door is open.
- The gear shifts to N (Neutral).
- · The hood is open.
- · The liftgate is open.

- 5 minutes have passed after the vehicle has stopped.
- One pedal driving is limited due to other reasons.

## **Using i-PEDAL**

i-PEDAL assists the driver to accelerate, decelerate, and stop the vehicle with only the accelerator pedal.

# Turning on/off the i-PEDAL

# · Turning on i-PEDAL:

Pull the left paddle shifter .+ once when the regenerative braking level is at 3. i-PEDAL is turned on and the instrument cluster displays the i-PEDAL. i-PEDAL is not available while the smart regeneration system is ON. Turn off the smart regeneration system first before using i-PEDAL.

### Turning off i-PEDAL:

Pull the right paddle shifter on once while the function is ON. Otherwise, shift the gear to R (Reverse) then to D (Drive) while the function is ON. i-PEDAL is disabled and regenerative braking level is set to 3.



## CAUTION

- Depending on the vehicle and road condition, the vehicle may not come to a stop although the i-PEDAL function is active. Check for the surroundings and depress the brake pedal to control the vehicle speed.
- Do not use i-PEDAL on slippery roads.

### i-PEDAL limitations

In the following conditions, the vehicle may not come to a stop although the i-PEDAL is properly activated. Depress the brake to stop the vehicle.

- · When driving on a slope, or when the vehicle is repeatedly driven and stopped
- · When the vehicle is driving through the end of the slope
- When driving on a slippery surface such as an icy, rainy, or muddy road
- · When the wheels are not properly aligned
- When a wheel slip or wheel spin occurs
- · When the weight on board is too heavy
- · When the vehicle is tilted to the side
- · When the tire is worn out too much

# **Smart Regeneration System**

The smart regeneration system recognizes vehicle-to-vehicle distance, speed and road gradient, and controls the regenerative braking level while coasting.

It reduces unnecessary depressing of pedals to improve energy efficiency and driver convenience.

#### INFORMATION

- · Coasting is the process of driving a vehicle without the brake pedal and the accelerator pedal depressed.
- The regenerative braking system uses the electric motor to decelerate. The electric motor converts the kinetic energy generated from decelerating the vehicle to electricity and charges the high voltage battery.

# **Smart Regeneration System on/off**



# Turning on the smart regeneration system:

While the & indicator is ON, shift the gear to D (drive), and pull and hold the right paddle shifter (-19) for over a second.

 The smart regeneration system turns ON and the regenerative braking level appears as AUTO.

## Turning off the smart regeneration system:

While the smart regeneration system is ON, pull and hold the right paddle shifter (-19) for over a second.

• The regenerative braking level appears instead of AUTO on the instrument cluster and the smart regeneration system turns off.

# Using one pedal driving:

While the smart regeneration system is ON, pull and hold the left paddle shifter (+0) for over 0.5 seconds (For more information, refer to the 'One Pedal Driving' section in this chapter.)

i-PEDAL is not available while the smart regeneration system is ON. Turn off the smart regeneration system first before using i-PEDAL.

# **Smart Regeneration System Operating Condition**

When the regenerative braking level appears as AUTO and the vehicle speed is above 6 mph (10 km/h), the system automatically controls the regenerative braking level under the following conditions.

- · The road gradient changes.
- · Distance from the vehicle ahead reduces or increases.
- Speed of the vehicle ahead reduces or increases.
- · You turn right or left at an intersection.
- A speed bump is ahead.
- · Your vehicle approaches a roundabout.



## CAUTION

- · When the forward safety warning light is ON, the smart regeneration system does not work properly. Depress the brake pedal for deceleration.
- The function that adjusts the regenerative braking intensity depending on the road gradient is only effective when the regenerative braking level is 0.
  - Braking intensity does not significantly change depending on the road gradient if the regenerative braking level is 1 or above.

# **Smart Regeneration Level Settings**



- 1. Smart Regeneration System operation indicator
- 2. Regenerative braking level indicator

When the smart regeneration system is ON, the regenerative braking level appears as **AUTO** on the instrument cluster. The **AUTO** appears in gray in the ready state. The system automatically controls the regenerative braking level according to the smart regeneration system operating conditions. If the front radar detects a vehicle in front, the indicator light appears in green.

# Setting smart regenerative braking distance level



2C\_SmartRegenerationSettings

Select **Electric Vehicle** > **Smart Regeneration** in the infotainment system and set the driver's distance level (Level 1/Level 2/Level 3) at the smart regenerative braking distance phase, and a distance from the leading vehicle is adjusted according to the setting.

# **Pausing Smart Regeneration System**

The smart regeneration system is temporarily turned off in the following conditions. While the system is turned off, adjust your vehicle speed depending on the road conditions.

- The vehicle is turned back ON after turning OFF.
- The gear is shifted to N (Neutral), R (Reverse) or P (Park).
- · Smart Cruise Control is activated.
- Electronic Stability Control (ESC) is operating/Anti-lock Brake System (ABS) is operating.
- The motor and battery temperature is high or low or there is a malfunction with the battery or transmission.
- · State of Charge (SOC) is high.

#### **Sensor Precautions**



2C SmartRegenerativeBrakingFrontRadar

#### 1. Front radar

Front radar detects the distance between your vehicle and the vehicle ahead to control the regenerative braking intensity.

# Smart regeneration system disabled

If the front radar is covered by any foreign material, such as snow, rain, or dirt, the detecting performance may decrease and disable the smart regeneration system.

The 'Check Smart Regeneration System' warning message may appear on the instrument cluster.

Also the regenerative braking level appears instead of **AUTO**.

Remove such foreign material and turn on the system again by pulling and holding the left paddle shifter - for over a second.

If the system does not operate normally after anything covering the sensor is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

## **Smart Regeneration System Precautions**

The smart regeneration system is not a substitute for proper and safe driving.

To prevent serious injury or death:

## General precautions

- Always maintain a safe distance from the vehicles ahead and adjust your vehicle speed to the road conditions.
- The smart regeneration system cannot detect pedestrians, vehicles making a sudden stops and vehicles coming from the opposite lane.
- Vehicles frequently changing lanes may cause a delay or may cause the smart regeneration system to react to a vehicle in an adjacent lane.
- Depress the brake pedal when stopping the vehicle.
- Depress the brake pedal to decelerate in the following conditions when:
  - The front part of the vehicle is lifted up because of the cargo loaded on the rear part of the vehicle.
  - The steering wheel is being steered.
  - The vehicle is being driven in the center of the lane.
  - The vehicle is being driven on a narrow or curved road.
- The smart regeneration system may not operate normally if there is interference from strong electromagnetic waves.

# Sensor precautions

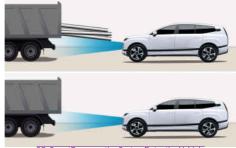
- If there is impact on or near the radar, the radar may be damaged or not be properly
  aligned near the radar, even though a warning message does not appear on the
  instrument cluster, the system may not operate properly. Have your vehicle inspected
  by an authorized HYUNDAI dealer.
- Always keep the sensor and the surrounding clean.
- Do not install a license plate frame or other objects such as bumper sticker, film, bumper guard, or bumper wrap near the radar.
- Use only genuine HYUNDAI parts to repair the bumper where the radar is located.
- Smart regeneration system may not work properly if the bumper has been replaced, or the surroundings of the radar has been damaged or painted.
- Do not spray the front radar or the surrounding area directly with high pressure water.

# Vehicle detection precautions

**Detecting vehicle ahead** 

 The smart regeneration system may not detect the vehicle ahead or may suddenly detect the vehicle ahead, such as when the smart regeneration system responds slowly, or when driving uphill, or when driving through a curve. The regenerative braking intensity may increase and decelerate your vehicle.

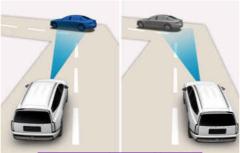
- Some vehicles in your lane may not be detected by the sensor:
  - Narrow vehicles, such as motorcycles or bicycles
  - Vehicles offset to one side
  - Slow-moving vehicles or sudden decelerating vehicles
  - Vehicles with small rear profile, such as trailers with no loads



2C SmartRegenerationSystemDetectingVehicle

 When the vehicle in front of the foregoing vehicle is at a stop and the foregoing vehicle changes the lane, the front sensors may be unable to recognize the stopped vehicle.

### **Driving on curves**



2C\_SmartRegenerationSystemDrivingOnCurve

On curves, the smart regeneration system may not detect a vehicle in the same lane, and may accelerate the vehicle by lowering the regenerative braking intensity automatically. Your vehicle speed may decelerate by increasing regenerative braking intensity automatically if a vehicle is detected in an adjacent lane or when a vehicle ahead is detected suddenly. Apply the brake pedal or accelerator pedal depending on the road and driving conditions.

## **Driving on hills**



\_SmartRegenerationSystemDrivingOnIncline

During uphill or downhill coasting, the smart regeneration system may not detect a moving vehicle in your lane, and cause your vehicle to accelerate. Also, your vehicle speed decelerates when a vehicle ahead is detected suddenly. Apply the brake pedal or accelerator pedal depending on the road and driving conditions.

### **Changing lanes**



- 1. Your vehicle
- 2. Change lane vehicle

When a vehicle moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. The smart regeneration system may not immediately detect the vehicle when the vehicle changes lanes abruptly.

# **Braking System**

### **Power-Assist Brakes**



### WARNING

Take the following precautions:

- Do not drive with your foot resting on the brake pedal. This will create abnormal high brake temperatures, excessive brake lining and pad wear, and increased stopping distances.
- When descending down a long or steep hill, use the paddle shifter to increase the
  regeneration braking level in order to decrease your speed without using the brake
  pedal excessively. Applying the brakes continuously will cause the brakes to overheat
  and may result in a temporary loss of braking performance.
- Wet brakes may impair the vehicle's ability to safely slow down and the vehicle may
  also pull to one side when the brakes are applied. Applying the brakes lightly indicates
  whether they have been affected in this way. Always test your brakes in this fashion
  after driving through deep water. To dry the brakes, lightly tap the brake pedal to heat
  up the brakes while maintaining a safe forward speed until brake performance returns
  to normal. Avoid driving at high speeds until the brakes function correctly.

Your vehicle has power-assisted brakes that adjust automatically through normal usage. If the vehicle is not running or is turned off while driving, the power assist for the brakes does not work. You can still stop your vehicle by applying greater force to the brake pedal than typical. The stopping distance, however, may be longer than with power brakes.

When the vehicle is not running, the reserve brake power is partially depleted each time the brake pedal is depressed. Avoid pumping the brake pedal when the power assist has been interrupted.

#### INFORMATION

- When the brake pedal is depressed under certain driving conditions or weather conditions, you may temporarily hear a noise. This is normal and does not indicate a problem with your brakes.
- While driving on a road with deicing chemicals, brake noise or abnormal tire wear may
  occur due to deicing chemicals. In a safe traffic condition, additionally apply the brakes
  to remove deicing chemicals on the brake discs and pads.

#### **Disc Brakes Wear Indicator**

When your brake pads are worn and new pads are required, you may hear a high pitched warning sound from your front or rear brakes. You may hear this sound come and go or it may occur whenever you depress the brake pedal.



### 🛝 WARNING

Always replace both the left and right brake pads on the front and rear axles at the same time.

# **Electronic Parking Brake (EPB)**



## ▲ WARNING

To prevent serious injury or death from unintended vehicle movement:

- Always come to a complete stop and continue to depress the brake pedal before parking, shift the gear into P (Park), pull up the EPB switch, and move the Start/Stop button to the OFF position. Take the key with you when leaving the vehicle.
- Never allow anyone who is unfamiliar with the vehicle to touch the EPB switch.
- Only release EPB when you are seated inside the vehicle with your foot firmly on the brake pedal.



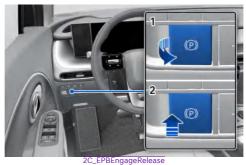
# CAUTION

- Driving with the parking brake on may overheat the braking system and cause premature wear or damage to brake parts.
- When leaving your keys with a parking attendant or assistant, be sure to inform him/her how to operate the EPB.
- If the Parking brake warning light is still on even though the EPB has been released, have the system inspected by an authorized HYUNDAI dealer.
- Do not drive your vehicle with EPB applied. It may cause excessive brake pad and brake rotor wear.
- Depress the brake pedal and release the parking brake manually with the EPB switch before you drive downhill or when backing up.

#### INFORMATION

- A clicking sound may be heard while operating or releasing the EPB. These conditions are normal and indicate that EPB is functioning properly.
- You can apply EPB even though the Start/Stop button is in the OFF position (only if battery power is available), but you cannot release it.

# Parking brake operation



- 1. Applying
- 2. Releasing

### Applying the parking brake

Pull up the EPB switch (direction 1) while depressing and holding the brake pedal.

· Make sure the Parking brake warning light comes on.

### Releasing the parking brake

With the Start/Stop button in the POWER ON or DRIVE READY position, press the EPB switch (direction 2) while depressing the brake pedal.

Make sure the Parking brake warning light goes off.

## EPB automatic operation

#### **EPB** automatic application

- · When requested by other systems.
- When the driver turns the vehicle off while Auto Hold is operating.

#### EPB automatic release

- When depressing the brake pedal and shifting out of P (Park) or N (Neutral) to R (Reverse) or D (Drive) with the vehicle ON.
  - Make sure the doors, hood, and liftgate are closed and the seat belt is fastened.
- When all below conditions are met and the accelerator pedal is depressed.
  - The vehicle is ON.
  - The driver's seat belt is fastened.
  - The driver's door, hood and liftgate are closed.
  - The gear is in R (Reverse), D (Drive) or manual mode.

Make sure the brake warning light goes off.

If the driver's seat belt is unfastened, or the hood, liftgate, doors are open, and you try to drive with EPB applied, a warning sounds and the 'To release EPB, fasten seatbelt and close door, hood and liftgate' message appears.

# Emergency braking

If there is a problem with the brake pedal while driving, emergency braking is possible by pulling up and holding the EPB switch. Braking is possible only while you are holding the EPB switch. However, braking distance may be longer than normal.



#### WARNING

To reduce the risk of serious injury or death, do not operate the EPB while the vehicle is moving except in an emergency situation. It may damage the brake system and cause a collision.

#### NOTICE

If you notice a noise or burning smell when the EPB is used for emergency braking, have the system inspected by an authorized HYUNDAI dealer.

#### INFORMATION

During emergency braking, the Parking brake warning light illuminates and you may hear a clicking noise.

#### **EPB** malfunction

EPB warning light illuminates if the Start/Stop button is in the POWER ON position and goes off in about 3 seconds if the system is operating normally.

If the EPB warning light remains on, comes on while driving, or does not come on when the Start/Stop button is POWER ON, the EPB may have malfunctioned.

If this occurs, have the system inspected by an authorized HYUNDAI dealer.

The EPB warning light may illuminate when the Electronic Stability Control (ESC) indicator light comes on to indicate that ESC is not working properly, but it does not indicate a malfunction of EPB.

#### NOTICE

- If the Parking brake warning light does not illuminate or blinks after the EPB switch has been pulled, the EPB may not be applied.
- If the EPB warning light is still on or the Parking brake warning light blinks, press the switch, and then pull it up. Repeat this one more time. If the EPB warning does not go off, have your vehicle towed on a flatbed tow truck to an authorized HYUNDAI dealer.

# Parking brake warning light

The Parking brake or warning light illuminates when the parking brake is applied with the Start/Stop button in the POWER ON position or when the vehicle is running.

Before driving, make sure the parking brake is released and the Parking brake warning light is OFF.

If the Parking brake warning light remains on after the parking brake is released while the vehicle is running, there may be a malfunction in the brake system.

If possible, stop driving the vehicle immediately. If that is not possible, use extreme caution while operating the vehicle and only continue to drive the vehicle until you can reach a safe location.

#### **Auto Hold**

Auto Hold maintains the vehicle in a standstill even though the brake pedal is not depressed after the driver brings the vehicle to a complete stop by depressing the brake pedal.

• When the vehicle is restarted, the last setting for Auto Hold is applied.

## Auto Hold operation



## **Activating Auto Hold**

With the driver's door and hood closed, press the **AUTO HOLD** button.

- The white AUTO HOLD Am indicator light comes on and the system is in standby.
- · When you stop the vehicle completely by depressing the brake pedal, Auto Hold maintains the brake pressure to hold the vehicle stationary. The indicator changes from white to green.

The vehicle remains stationary even if you release the brake pedal.

• If you depress the accelerator pedal with the gear in D (Drive), R (Reverse), or Manual shift mode, the Auto Hold is released automatically and the vehicle starts to move. The AUTO HOLD AUTO indicator light changes from green to white.



### MARNING

Always look around your vehicle before depressing the accelerator pedal to release Auto Hold.

#### **Deactivating Auto Hold**

Press the AUTO HOLD button while depressing and holding the brake pedal.

The AUTO HOLD AUTO indicator light turns off.



### WARNING

To prevent unintended vehicle movement, always depress your foot on the brake pedal to deactivate the Auto Hold before you:

- · Drive downhill.
- Drive the vehicle in R (Reverse).
- · Park the vehicle.

#### Non-operating conditions

The Auto Hold does not operate when EPB is applied.

- The Auto Hold automatically switches to EPB when:
  - The driver's door or hood is opened.
  - The vehicle is in a standstill for more than 10 minutes.

- The vehicle is on a steep slope.
- The vehicle moves several times.
- The liftgate is opened (for rotary gear shift dial type).

The Parking brake warning light comes on, the AUTO HOLD AND indicator light changes from green to white, a warning sounds, and a message appears to inform you that EPB has been automatically engaged. Before driving, depress the brake pedal, check the surrounding area, and release the parking brake manually with the EPB switch.

### NOTICE

- If the AUTO HOLD AND indicator light changes to yellow, or the driver's door, hood, or liftgate open detection system malfunctions, Auto Hold does not work properly. Contact an authorized HYUNDAI dealer.
- · When the conversion from Auto Hold to EPB is not working properly, a warning sounds and the 'Press brake pedal to deactivate AUTO HOLD' message appears. Depress the brake pedal to keep the vehicle stationary.

## **Brake Disc Cleaning (BDC)**

Use the BDC function if noise is generated when depressing the brake while driving or if the brake disc gets rusty. It helps reduce the noise and rust. Regenerative braking is restrained while BDC is operated, which may lower the electric energy efficiency.

Press and hold the AUTO HOLD button for over 3 seconds.

- Brake disc cleaning starts operating when the message 'Brake Disc Cleaning' appears on the cluster display.
- · Regenerative braking is restrained while the brake is depressed about 10 times while driving (it may differ depending on driving conditions). It helps reduce the noise and rust.
- · BDC function turns off automatically when the operation is completed. It can also be turned off before operation is completed by turning off the vehicle or pressing the AUTO HOLD button for over 3 seconds.

# **Anti-Lock Brake System (ABS)**



### ▲ WARNING

ABS or ESC system will not prevent collisions due to improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead of you. Always reduce the vehicle speed in extreme road conditions.

The braking distance for vehicles equipped with ABS or ESC may be longer than for those without these systems in the following road conditions:

- · Rough, gravel, or snow-covered roads.
- On roads where the road surface is pitted or has different surface height.
- Tire chains are installed on your vehicle.

Never test the safety features of an ABS or ESC equipped vehicle by high speed driving or cornering. It may cause a collision and endanger the safety of yourself or others.

ABS is an electronic braking system that helps prevent a braking skid. ABS allows the driver to steer and brake at the same time.

## ABS operation

To obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Depress your brake pedal as hard as possible.

When you apply your brakes under conditions that may lock the wheels, you may hear sounds from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

ABS does not reduce the time or distance to stop the vehicle.

Always maintain a safe distance from the vehicle in front of you.

ABS does not prevent a skid that results from sudden changes in direction, such as trying to take a corner too fast or making a sudden lane change. Always drive at a safe speed for the road and weather conditions.

ABS cannot prevent a loss of stability. Always steer moderately when braking hard. Severe or sharp steering wheel movement can still cause your vehicle to veer into oncoming traffic or off the road.

On loose or uneven road surfaces, operation of the ABS may result in a longer stopping distance than for vehicles equipped with a conventional brake system.

The ABS ABS warning light stays on for several seconds after the Start/Stop button is in the POWER ON position.

During that time, ABS goes through self-diagnosis and the light goes off if everything is normal. If the light stays on, contact an authorized HYUNDAI dealer as soon as possible.



### WARNING

If the ABS ABS warning light is on and stays on, you may have a problem with the ABS. Your power brakes work normally. To reduce the risk of serious injury or death, contact your authorized HYUNDAI dealer as soon as possible.

#### NOTICE

When you drive on a road having poor traction, such as an icy road, and apply your brakes continuously, ABS is active continuously and the ABS ABS warning light may illuminate. Pull your vehicle over to a safe place and turn off the vehicle.

Restart the vehicle. If the ABS warning light is off, your ABS system is normal.

If not, contact an authorized HYUNDAI dealer as soon as possible.

#### INFORMATION

When you jump start your vehicle because of a drained battery, the ABS ABS warning light may turn on at the same time. It does not mean your ABS is malfunctioning. Have the battery recharged before driving the vehicle.

# **Electronic Stability Control (ESC)**

ESC helps stabilize the vehicle during cornering maneuvers.

ESC checks where you are steering and where the vehicle is actually going. ESC applies braking pressure to any one of the vehicle's brakes and intervenes in the electric vehicle control system to assist the driver with keeping the vehicle on the intended path. It is not a substitute for safe driving practices. Always adjust your speed and driving to the road conditions.



### WARNING

Never drive too fast for the road conditions when cornering, ESC does not prevent a collision.

Excessive speed in turns, abrupt maneuvers, and hydroplaning on wet surfaces may result in severe collisions.

# ESC indicator light (blinks)



### ESC OFF indicator light (comes on)



- When the Start/Stop button is in the POWER ON position, the ESC ₽ indicator light and the ESC OFF & indicator light illuminates, then goes off if the ESC system is operating normally.
- The ESC indicator light blinks whenever ESC is operating.
- If the ESC indicator light stays on, have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.
- The ESC OFF indicator light comes on when ESC is turned off.

# ESC operation

#### **Activating ESC**

When the Start/Stop button is in the POWER ON position, ESC and the ESC OFF indicator lights illuminate for about three seconds. After both lights go off, ESC is activated.

### When ESC is activated, the ESC ♣ indicator light blinks:

- · When you apply your brakes under conditions that may lock the wheels, you may hear sounds from the brakes, or feel a corresponding sensation in the brake pedal.
- If Smart Cruise Control has been used when ESC activates, Smart Cruise Control automatically disengages. Refer to the 'Smart Cruise Control (SCC)' section in chapter 7.
- When ESC activates, the vehicle may not respond to the accelerator as it does under routine conditions.



### When ESC is active:

- Drive slowly and NEVER attempt to accelerate.
- Never turn off ESC while the ESC indicator light is blinking. You may lose control of the vehicle and crash.

#### NOTICE

Driving with wheels and tires with different sizes may cause the ESC system to malfunction. Before replacing tires, make sure all four tires and wheels are the appropriate size for your vehicle. Never drive the vehicle with different sized wheels and tires installed.

# ESC OFF operation



### **Activating ESC OFF**

#### State 1 (traction control disabled)

Press the ESC OFF button briefly. The ESC OFF & indicator light illuminates and the message, 'Traction control disabled' appears.

The traction control function of ESC (electric vehicle control management) is disabled, but the brake control function of ESC (braking management) still operates.

## When driving

The ESC OFF mode should only be used briefly to help free the vehicle if stuck in snow or mud, by temporarily stopping operation of ESC, to maintain wheel torque.

To turn off ESC while driving, press the ESC OFF button while driving on a flat road surface.

#### NOTICE

To prevent damage to the transmission:

- Do not allow wheel(s) of one axle to spin excessively while the ESC, ABS, and Parking brake warning lights appear. The repairs would not be covered by the vehicle warranty. Reduce motor power and do not spin the wheel(s) excessively while these lights appear.
- When operating the vehicle on a dynamometer, make sure ESC is turned off (ESC OFF light illuminated).

#### INFORMATION

- If the Start/Stop button is moved to the OFF position when ESC is off, ESC remains off. Upon restarting the vehicle, ESC automatically turns on again.
- Turning ESC off does not affect ABS or standard brake system operation.

# Vehicle Stability Management (VSM)

VSM is a function of the ESC system. It helps the vehicle stay stable when accelerating or braking suddenly on wet, slippery, and rough roads where traction over the four tires can suddenly become uneven.



### WARNING

VSM is not a substitute for safe driving practices. To prevent serious injury or death:

- Always monitor the speed and the distance to the vehicle ahead of you.
- · Never drive too fast for the road conditions. Excessive speed in bad weather or on slippery and uneven roads may result in severe collisions.

# VSM operation

## Activating VSM

When you apply your brakes under conditions that can activate ESC, you may hear sounds from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your VSM is active.

# **Deactivating VSM**

To deactivate VSM operation, press the ESC OFF button. ESC OFF & indicator light illuminates.

To activate VSM again, press the ESC OFF button again. The ESC OFF & indicator light turns off.

## **Non-operating conditions**

- When driving on a banked road such as gradient or incline.
- When driving in reverse.
- When the ESC OFF & indicator light is on.
- When the Motor Driven Power Steering (MDPS) A warning light is on or blinks.



### MARNING

If the ESC OFF & indicator light or MDPS Q! warning light stays illuminated or blinks, your vehicle may have a malfunction with the VSM system. Have your vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

## Hill-Start Assist Control (HAC)

HAC helps prevent the vehicle from rolling backwards when starting from a stop on a hill.



#### WARNING

Always be ready to depress the accelerator pedal when starting from a stop on an uphill slope. HAC activates only for about 2 seconds.



- HAC does not activate when the gear is shifted to P (Park) or N (Neutral).
- If ESC malfunctions, HAC does not activate.

### INFORMATION

HAC activates even when the ESC is deactivated.

# **Downhill Brake Control (DBC)**



2C\_DownhillBrakeControl

DBC assists when descending down a steep hill without having to depress the brake pedal.

The system automatically applies the brakes to maintain vehicle speed below a certain speed and allows the driver to concentrate on steering the vehicle down hill.

The system is deactivated whenever the vehicle is off.

Press the DBC button to activate the system and press the button again to deactivate.

# DBC operation

Mode	Indicator	Description
Standby	Green Light on	Press the DBC button when vehicle speed is under 37 mph (60 km/h). DBC activates and enters the standby mode. The system does not activate if vehicle speed is above 37 mph (60 km/h).
Activated	Green Light blink	In the standby mode, DBC activates under the following conditions:  • The hill is steep enough.  • The brake pedal or accelerator pedal is not depressed.  • Vehicle speed is within 2-25 mph (4-40 km/h) range.  Within the activation speed range 2-25 mph (4-40 km/h) when forward or 1.5-5 mph (2.5-8 km/h) when reverse, the driver can control the vehicle speed by depressing the brake pedal or accelerator pedal.

Mode	Indicator	Description	
	Green Light off	DBC is deactivated or in standby under the following conditions:  The DBC button is pressed again.  Vehicle speed is over 37 mph (60 km/h).	
Deactivated	DBC is deactivated but maintains the standby method the following conditions:  • The hill is not steep enough.		
System malfunction	Yellow Light on	The yellow warning light illuminates when the system may have malfunctioned or may not work properly during activation. If this occurs, Downhill Brake Control is deactivated. Contact an authorized HYUNDAI dealer as soon as possible.  If DBC is not working properly, 'Downhill Brake Control disabled. Control vehicle speed.' warning message appears on the cluster display and you may hear a warning sound. If this occurs, control the vehicle speed by depressing the brake pedal.	

### **Non-operating conditions**

- When the gear is in P (Park).
- When ESC is activated.



### MARNING

Always deactivate DBC on normal roads. The system might activate unintentionally from the standby mode when driving through speed bumps or making sharp curves.



# **CAUTION**

- DBC may not deactivate on steep inclines even though the brake pedal or accelerator pedal is depressed.
- DBC may not always maintain vehicle speed at a certain speed.

# INFORMATION

- Noise or vibration may occur from the brakes when DBC is activated.
- The rear stop light comes on when DBC is activated.

# **Brake Assistant System (BAS)**

The BAS provides additional pressure when the brake pedal is momentarily and strongly pressed in situations where sudden braking is required while driving.

The BAS reduces the time for ABS control to engage and consequently reduces the braking distance, by providing additional pressure up to the point of ABS intervention.



#### WARNING

The system may not operate depending on driver's driving habit, driving speed, the degree to which the brake pedal is depressed and the road surface condition.

## **Crosswind Stability Control (CSC)**

CSC works with ESC and MDPS to stabilize the vehicle when it is being shaken or pushed outward due to strong crosswind.

## CSC operation

## **Activating CSC**

- When driving over a bridge or next to a large truck or bus, strong crosswinds may cause the vehicle to shake or pushed outward. The CSC automatically adjusts the vehicle posture and steering wheel to correct the course of the vehicle.
- When activated, the ESC ₽ indicator light illuminates and the 'Crosswind stability control activated' warning message appears on the cluster display with a warning sound.
- · When activated, the driver may feel a slight vibration of the vehicle and awkwardness of the steering wheel, due to the braking and MDPS.

#### **Deactivating CSC**

CSC may not operate, or may deactivate in the following conditions:

- Vehicle speed is about below 45 mph (70 km/h) or about above 112 mph (180 km/h).
- · When the driver makes a sharp turn.
- When the brake pedal is depressed past a certain level.
- Driving on a bumpy road, ice, snow, or slippery surface such due to ice, snow, or rain.
- When ESC OFF & indicator light illuminates by turning off the ESC (ESC OFF state 2).
- FSC is activated.
- Driving assistance system (Forward Collision-Avoidance Assist, Blind-Spot Collision-Avoidance Assist, Lane Keeping Assist, Lane Following Assist, etc.) are activated.

#### CSC malfunction

- When ESC has problems, CSC does not operate.
- When MDPS has problems, CSC may partially operate.
- If the ESC ₹ or MDPS ♠! warning light stays illuminated or blinks, have your vehicle inspected by an authorized HYUNDAI dealer.



### MARNING

CSC is only a supplementary system to assist the driver. The driver should be responsible for the control of the vehicle.

Always hold the steering wheel while driving and depress the brake pedal to reduce speed if necessary.

# **Trailer Stability Assist (TSA)**

TSA operates as a vehicle stability control system. The TSA system works to stabilize the vehicle and trailer when the trailer sways or oscillates. There are various reasons making the vehicle sway and oscillate. In most cases it happens at high speed. However, if the trailer is affected by crosswinds, buffeting, and improper overloading, there may be a risk of swaying.

Factors of swaying are:

- High speed
- Strong crosswinds
- Improper overloading
- · Sudden controlling of steering wheel
- · Uneven road

The TSA system continuously analyzes the vehicle and trailer instability. When the TSA system detects some sway, the brakes are applied automatically to stabilize the vehicle on the front wheel. However, if it is not enough to stabilize, the brakes are applied on all wheels automatically and motor power is properly reduced. When the vehicle is stable from swaying, the TSA system deactivates.

#### **Self-Levelizer**

The self-levelizer is a mechanical system which reduces the lowering of rear height when loading, and also performs a damping role while driving.

## **Good Braking Practices**



## WARNING

Whenever leaving the vehicle or parking, always come to a complete stop and continue to depress the brake pedal. Shift the gear to the P (Park) position, then apply the EPB, and press the Start/Stop button to the OFF position.

Vehicles parked with the EPB not applied or not fully engaged may roll inadvertently and may cause injury to the driver and others. ALWAYS apply the parking brake before exiting the vehicle.

Wet brakes can be dangerous! The brakes may get wet if the vehicle is driven through standing water or if it is washed. Your vehicle will not stop as quickly if the brakes are wet. Wet brakes may cause the vehicle to pull to one side.

To dry the brakes, apply the brakes slightly until the braking action returns to normal If the braking action does not return to normal, stop as soon as it is safe to do so. Have your vehicle inspected by an authorized HYUNDAI dealer.

DO NOT drive with your foot resting on the brake pedal. Even light, but constant pedal pressure can result in the brakes overheating, brake wear, and possibly even brake failure.

If a tire goes flat while you are driving, apply the brakes gently and keep the vehicle pointed straight ahead while you slow down. When you are moving slowly enough for it to be safe to do so, pull off the road and stop in a safe location.

Keep your foot firmly on the brake pedal when the vehicle is stopped to prevent the vehicle from rolling forward.

# **All Wheel Drive (AWD)**

## f Equipped

The AWD system delivers motor power to all front and rear wheels for maximum traction. AWD is useful when extra traction is required on roads such as slippery, muddy, wet, or snow-covered roads.

AWD may also be used for occasional off-road use such as established unpaved roads and trails. Always reduce the speed to a level that is appropriate for those conditions.



## MARNING .

To reduce the risk of serious injury or death:

- Do not drive in conditions that exceed the vehicle's intended design such as challenging off-road conditions.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of a rollover is greatly increased if you lose control of your vehicle at highway
- Loss of control often occurs if two or more wheels drop off the roadway and the driver over steers to reenter the roadway.
- In the event your vehicle leaves the roadway, do not steer sharply. Instead, slow down before pulling back into the travel lanes.

### NOTICE

- Do not drive in water if the water level is higher than the bottom of the vehicle.
- Check your brake condition once you are out of mud or water. Depress the brake pedal several times as you move slowly until you feel normal braking condition return.
- Shorten your scheduled maintenance interval if you drive in off-road conditions such as sand, mud, or water. (For more information, refer to the 'Maintenance Under Severe Usage and Low Mileage Conditions' section in chapter 9.)
- · Always wash your vehicle thoroughly after off-road use, especially the bottom of the vehicle.
- Make sure that AWD equipped vehicles are towed by a flat-bed tow truck.

#### **AWD Mode**

# Auto AWD mode (Normal driving)

If the AWD system determines there is a need for AWD, the driving power is distributes to all four wheels automatically.

# For safe AWD operation

## Before driving

Make sure all passengers always wear their seat belts.

### Driving on snow-covered or icy roads

- Start off slowly by applying the accelerator pedal gently.
- Use snow tires or tire chains.
- Keep a sufficient distance between your vehicle and the vehicle in front.
- Use vehicle braking during deceleration.
- · Avoid speeding, rapid acceleration, sudden brake applications, and sharp turns to prevent skids.

### Driving in sand or mud

- Maintain slow and constant speeds.
- Use tire chains when driving in mud if necessary.
- Keep a sufficient distance between your vehicle and the vehicle in front.
- Reduce the vehicle speed and always check the road condition.
- · Avoid speeding, rapid acceleration, sudden brake applications, and sharp turns to prevent getting stuck.

#### NOTICE

When the vehicle is stuck in snow, sand, or mud, place a non-slip material under the drive wheels to provide traction or slowly spin the wheels in forward and reverse causing a rocking motion that may free the vehicle.

### **Driving uphill**

- Before starting off, check if it is possible to drive uphill.
- Drive as straight as possible.

## Driving downhill

- Drive slowly when using vehicle braking while driving downhill.
- Drive straight as possible.



### WARNING

- Exercise extreme caution driving up or down steep hills. The vehicle may roll over in the grade, terrain, and water/mud conditions.
- Do not drive across steep hills. A slight change in the wheel angle may destabilize the vehicle. A stable vehicle may lose stability if the vehicle stops its forward motion. Your vehicle may roll over, resulting in a serious injury or death.

#### **Driving through water**

- Try to avoid driving in deep standing water. It may stall your vehicle.
- Do not change gears while driving in water.

#### **Additional driving conditions**

- Become familiar with the off-road conditions before driving.
- Always pay attention when driving off-road and avoid dangerous areas.
- Drive slowly when driving in heavy wind.

- Reduce vehicle speed when cornering. The center of gravity of AWD vehicles is higher than conventional 2WD vehicles. The vehicle is more likely to roll over if you turn the steering wheel too quickly.
- Always hold the steering wheel firmly when you are driving off-road.



### MARNING

Do not grab the inside of the steering wheel when you are driving off-road. You may hurt your arm by a sudden steering maneuver or from steering wheel rebound due to an impact with objects on the ground. You may lose control of the steering wheel that may lead to serious injury or death.

### **AWD Terrain Mode**



Press the DRIVE/TERRAIN button to change from normal driving mode to multi terrain mode. Press the button up or down to select SNOW, MUD, or SAND.

Selected mode		Description
SNOW	<b>₩</b>	<ul> <li>Use this mode when driving on slippery roads.</li> <li>The motor's driving power is properly distributed to the wheels, to help start the vehicle stably on slippery roads or keep tires from slipping.</li> </ul>
MUD	<b></b>	<ul> <li>Use this mode when driving on muddy, unpaved or uneven roads.</li> <li>The motor's driving power is properly distributed to the wheels, to secure sufficient driving force that helps start the vehicle.</li> </ul>
SAND	<b>₩</b>	<ul> <li>Use this mode when driving on smooth, dry sand or deep gravel and unpaved roads.</li> <li>The motor's driving power is properly distributed to the wheels, to help drive safely on smooth, dry sand or deep gravel and unpaved roads.</li> </ul>



Maintain DRIVE mode when driving on roads in normal conditions. Driving in TERRAIN mode on normal roads may damage the AWD system and cause mechanical vibration or noise.

When driving (especially when cornering) under normal road conditions in TERRAIN mode, a driver may find minor mechanical vibration or noise, which is extremely normal phenomenon, not a malfunction. When TERRAIN mode is released, such noise or vibration will be immediately gone. When you turn off

TERRAIN mode, it can lead to little shocks but this is a normal phenomenon that lasts until the traction forces on the front and rear wheels of the vehicle are released.

## **Emergency Precautions**

#### Tires

Do not use tires or wheels with different size and type from the one installed on your vehicle. It may affect the safety and performance of your vehicle, which could cause steering failure or rollover causing serious injury.

When replacing the tires, be sure to equip all four tires with the same size, type, tread, brand, and load-carrying capacity. If you equip your vehicle with any tire/wheel combination not recommended by HYUNDAI for off-road driving, do not use these tires for highway driving.



# 🛕 WARNING

Never start or run the vehicle while a full-time AWD vehicle is raised on a jack. The vehicle may slip or roll off of a jack causing serious injury or death.

# Towing

AWD vehicles must be towed with all the wheels off the ground. For more information, refer to the 'Towing' section in chapter 8.

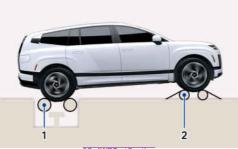
# Vehicle inspection

- If the vehicle needs to be operated on a vehicle lift do not attempt to stop any of the four wheels from turning. This could damage the AWD system.
- · Never engage the parking brake while running the vehicle on a car lift. This may damage the AWD system.

# Dynamometer testing

A full-time AWD vehicle must be tested on a special four wheel chassis dynamometer.

#### If a 2WD roll tester must be used:



2C 4WDTestCaution

- 1. Roll tester (Speedometer)
- 2. Temporary free roller
- 1. Check the tire pressures recommended for your vehicle.
- 2. Place the front wheels on the temporary free roller for a speedometer test as shown in the illustration.
- 3. Release the parking brake.
- 4. Place the rear wheels on the roll tester as shown in the illustration.



# WARNING

Keep away from the front of the vehicle while the vehicle is in gear on the dynamometer. The vehicle may jump forward and cause serious injury or death.

#### NOTICE

- Never engage the parking brake while performing the test.
- · When the vehicle is lifted up, do not operate the front and rear wheel separately. All four wheels should be operated.

# **Drive Mode Integrated Control System**



The drive mode can be selected according to the driver's preference or road condition.

The system resets to ECO mode, when the vehicle is restarted.

## **Selecting Drive Mode**

#### INFORMATION

- When ECO/SPORT mode is selected, the ECO/SPORT indicator illuminates on the instrument cluster.
- Energy efficiency in ECO mode varies according to the driver's driving habit and road condition.
- In SPORT mode, the energy efficiency may decrease.

### **ECO** mode

ECO mode helps improve energy efficiency for eco-friendly driving.

#### When ECO mode is activated:

- The acceleration response may be slightly reduced if the accelerator pedal is depressed moderately.
- The air conditioner performance may be limited.
- The shift pattern of the transmission may change.

#### SPORT mode

SPORT mode provides sporty but firm riding.

# When the SPORT mode is activated:

Upshifts are delayed when accelerating.

## MY DRIVE mode

In MY DRIVE mode, you can adjust the vehicle performance for each function.

 To set MY DRIVE MODE, select Setup > Vehicle > Drive Mode > MY DRIVE MODE in the infotainment system.

MY DRIVE MODE			
Motor	ECO/NORMAL/SPORT		
Steering	NORMAL/SPORT		

### INFORMATION

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

# Terrain Mode (for AWD vehicle)



The terrain mode helps achieve optimal driving performance by controlling vehicle and braking according to the road conditions.

Press the **DRIVE/TERRAIN** button to change from drive mode to terrain control mode. For more information, refer to the 'AWD Terrain Mode' section in this chapter.

### DRIVE/TERRAIN button

- 1. Push DRIVE/TERRAIN button to select between DRIVE and TERRAIN mode.
- 2. Toggle UP/DOWN to select between the different DRIVE or TERRAIN modes.
  - DRIVE modes: ECO/NORMAL/SPORT/MY DRIVE
  - TERRAIN modes: SNOW/MUD/SAND

For more information, refer to the 'AWD Terrain Mode' and 'Selecting Drive Mode' section in this chapter.

# **Road Active Noise Control**

Road Active Noise Control helps reduce noise caused while driving.

The system may not operate properly in the following conditions:

- · Any of the window is open.
- · Any of the door is open.
- · The liftgate is open.
- · Vehicle's microphone and speaker is blocked by loads.

### **System Malfunction**

When Road Active Noise Control is not working properly, the 'Check Road Active Noise Control system' warning message may appear on the cluster display. If this occurs, have the system be inspected by an authorized HYUNDAI dealer.

# **Active Sound Design**

- Active sound design provides various virtual driving sounds based on the driving mode, vehicle speed, and accelerator pedal. You can adjust the volume and change the settings for acceleration pedal response and sound style.
- You can activate or deactivate the Active Sound Design function from the Settings menu in the infotainment system. Select:
  - Setup > Vehicle > Active Sound Design > Horizon/Heritage: Black
- · Any unauthorized replacement of the vehicle's speaker and amplifier may cause Active Sound Design to malfunction.

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The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the guick reference guide.

# **Active Air Flap (AAF)**



AAF system controls the air flap below the front bumper to cool the vehicle parts and improve energy efficiency.

 AAF system could be activated regardless of the vehicle condition. (Parking, driving, etc.)

#### **AAF Malfunction**



The AAF system may not operate normally if the air flap is temporarily opened due to foreign factors or if the controller is contaminated by snow or rain, etc.

When 'Check Active Air Flap System' is popped up on display, stop the vehicle in a safe place and check the status of the air flap.

Start the vehicle after performing the necessary work like foreign matter removal and waiting 10 minutes. If the pop-up remains up, contact an authorized HYUNDAI dealer.



### 🐧 CAUTION

- Regardless of the pop-up, if the air flaps aren't in the same position, stop the vehicle and wait for 10 minutes and start the vehicle and inspect the air flap.
- The AAF system is actuated by motors. Do not disturb actuation or apply force excessively. It may cause failure.

# **Special Driving Conditions**

### **Hazardous Driving Conditions**

When hazardous driving conditions are encountered such as water, snow, ice, mud, and sand:

- Drive cautiously and allow for longer braking distances.
- Avoid abrupt braking or steering.
- · If your vehicle is stuck in snow, mud, or sand, use the second gear. Accelerate slowly to avoid unnecessary wheel spin.
- Put sand, rock salt, tire chains, or other non-slip materials under the wheels to provide additional traction if stuck in ice, snow, or mud.



# WARNING

The sudden change in tire speed may cause the tires to skid. Be careful when downshifting on slippery surfaces.

### **Rocking the Vehicle**

If it is necessary to rock the vehicle to free it from snow, sand, or mud, first turn the steering wheel right and left to clear the area around your front wheels. Then, shift back and forth between R (Reverse) and a forward gear.

Try to avoid spinning the wheels, and do not race the vehicle.

To prevent transmission wear, wait until the wheels stop spinning before shifting gears. Release the accelerator pedal while shifting, and press lightly on the accelerator pedal while the transmission is in gear. Slowly spinning the wheels in forward and reverse directions causes a rocking motion that may free the vehicle.



### 🥼 WARNING

Always turn off the ESC system before rocking the vehicle. If the vehicle is stuck and excessive wheel spin occurs, the temperature in the tires may increase very quickly. If the tires become damaged, a tire blow out or tire explosion may occur - you and others may be injured. Do not attempt this procedure if people or objects are near the vehicle.

If you attempt to free the vehicle, the vehicle may overheat quickly, possibly causing a motor compartment fire or other damage. Try to avoid spinning the wheels as much as possible to prevent overheating of the tires or the motor. DO NOT allow the vehicle to spin the wheels above 35 mph (56 km/h).

If you are still stuck after rocking the vehicle a few times, have the vehicle pulled out by a tow vehicle to avoid motor overheating, possible damage to the transmission, and tire damage. For more information, refer to the 'Towing' section in chapter 8.

# **Smooth Cornering**

Avoid braking or paddle shifter in corners, especially when roads are wet. Ideally, cornering should be taken under gentle acceleration.

# **Driving at Night**

Night driving presents more hazards than driving in the daylight. Here are some important tips to remember:

- Slow down and keep more distance between you and other vehicles, because it may be more difficult to see at night, especially in areas where there are no street lights.
- Adjust your mirrors to reduce the glare from other drivers' headlights.
- Keep your headlights clean and properly aimed. Dirty or improperly aimed headlights
  can make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You may be temporarily blinded, and it takes several seconds for your eyes to readjust to the darkness.

### **Driving in the Rain**

Rain and wet roads can make driving dangerous. When driving in the rain or on slick pavement:

- Slow down and allow extra following distance. A heavy rainfall makes it harder to see and increases the distance needed to stop your vehicle.
- Turn OFF your Cruise Control. (if equipped)
- Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- Make sure your tires have enough tread. If your tires do not have enough tread, making a quick stop on wet pavement may cause a skid and possibly lead to a collision. For more information, refer to the 'Tires and wheels' section in chapter 9.
- Turn on your headlights to make it easier for others to see you. Using your headlights when using your windshield wipers is required in some jurisdictions.
- Driving too fast through large puddles may affect your brakes. If you must go through puddles, try to drive through them slowly.
- If you believe your brakes are wet, apply them several times while the vehicle is moving slowly.

# Hydroplaning

If the road is wet enough and you are driving fast enough, your vehicle may have little or no contact with the road surface and actually ride on the water. The best advice is SLOW DOWN when the road is wet.

The risk of hydroplaning increases as the depth of tire tread decreases. For more information, refer to the 'Tires and wheels' section in chapter 9.

# **Driving in Flooded Areas**

Avoid driving through flooded areas unless you are sure the water is not deeper than the bottom of the wheel hub. If you are not sure, turn around and find a different route.

Drive through any water slowly. Allow adequate stopping distance because the brake performance can be reduced.

After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

# **Highway Driving**

#### **Tires**

Adjust the tire inflation pressure, as specified. Under-inflation may overheat or damage the tires.

Do not install worn-out or damaged tires, which may reduce traction or fail.

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Never over-inflate your tires above the maximum inflation pressure, as specified on your tires.

# Coolant and high voltage battery

Driving at higher speeds on the highway consumes more electric energy and is less efficient than driving at a slower, more moderate speed. Maintain a moderate speed in order to conserve electric energy when driving on the highway.

Be sure to check both the coolant level and the electric energy level before driving.

### **Winter Driving**

### Winter precautions

#### **Check battery and cables**

Winter temperatures may affect the battery performance. Inspect the battery and cables, as specified in chapter 9. The battery charging level can be checked by an authorized HYUNDAI dealer or in a service station.

### To prevent locks from freezing

Spray approved de-icing fluid or glycerin into key holes. When a lock opening is already covered with ice, spray approved de-icing fluid over the ice to remove it. When an internal part of a lock freezes, try to thaw it with a heated key. Carefully use the heated key to avoid an injury.

#### Use approved window washer anti-freeze solution

Add window washer anti-freeze solution, as specified on the window washer container. Window washer anti-freeze solution is available from an authorized HYUNDAI dealer, and most vehicle accessory outlets.

Do not use coolant or other types of anti-freeze solution, to prevent any damage to the vehicle paint.

#### Do not let your parking brake freeze

Under some conditions, your parking brake may freeze in the engaged position. This is most likely to happen when there is an accumulation of snow or ice around or near the rear brakes or the brakes are wet. When there is the risk that your parking brake may freeze: temporarily apply the parking brake with the gear in P (Park), then block the rear wheels, and then release the parking brake.

#### Do not let ice and snow accumulate underneath

Under some conditions, snow and ice may build up under the fenders and interfere with the steering. When driving in such conditions during the severe winter, check underneath the vehicle on a regular basis, to make sure that the front wheels and the steering components are not blocked.

#### Carry emergency equipment

In accordance with weather conditions, carry appropriate emergency equipment, while driving. Some of the items you may want to carry include tire chains, tow straps or chains,

flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, coveralls, blanket, etc.

### Do not place objects or materials in the motor compartment

Putting objects or materials in the motor compartment may cause a motor failure. Such damage is not covered by the manufacturer's warranty.

### Snow or icy conditions

You need to keep sufficient distance between your vehicle and the vehicle in front.

Apply the brakes gently. Speeding, rapid acceleration, sudden brake applications, and sharp turns are very hazardous practices. Sudden brake applications on snowy or icy roads may cause the vehicle to skid.

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires.

Always carry emergency equipment. You may want to carry tire chains, tow straps or chains, a flashlight, emergency flares, sand, a shovel, jumper cables, a window scraper, gloves, ground cloth, coveralls, a blanket, etc.

#### Snow tires

Use snow tires when the road temperature is below 45 °F (7 °C). If you mount snow tires on your vehicle, be sure to use the same inflation pressure as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions.

The traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. Check with the tire dealer for maximum speed recommendations.



#### WARNING

Snow tires should be equivalent in size and type to the vehicle's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.

#### Tire chains



### WARNING

The use of tire chains may adversely affect vehicle handling:

- Drive less than 20 mph (30 km/h) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully and avoid bumps, holes, sharp turns, and other road hazards, which may cause the vehicle to bounce.
- Avoid sharp turns or locked wheel braking.
- Install tire chains only in pairs and on the rear tires. Installing tire chains on the tires provides a greater driving force, but does not prevent side skids.





2C TireChain 2



# CAUTION

Since the sidewalls of radial tires are thinner than other types of tires, they may be damaged by mounting some types of tire chains on them. Therefore, the use of snow tires is recommended instead of tire chains. If tire chains must be used, use genuine HYUNDAI Parts and install the tire chains after reviewing the instructions provided with the tire chains. Damage to your vehicle caused by improper tire chain use is not covered by your vehicle manufacturer's warranty.

255/60 R19	
275/50 R20	Fabric-type chain
285/45 R21	

When using tire chains, attach them to the front wheels.

#### NOTICE

Do not install studded tires without first checking local and municipal regulations for possible restrictions against their use.

#### **Chain Installation**

When installing tire chains, follow the manufacturer's instructions and mount them as tightly possible. Drive slowly (less than 20 mph (30 km/h) or the chain manufacturer's recommended speed limit) with chains installed. If you hear the chains contacting the body or chassis, stop and tighten them. If they still make contact, slow down until the noise stops. Remove the tire chains as soon as you begin driving on cleared roads.

When mounting snow chains, park the vehicle on level ground away from traffic. Turn on the vehicle's Hazard Warning Flasher and place a triangular emergency warning device behind the vehicle (if available). Always place the vehicle in P (Park), apply the parking brake, and turn off the vehicle before installing snow chains.

### NOTICE

### When using tire chains:

- Wrong size chains or improperly installed chains may damage your vehicle's brake lines, suspension, body, and wheels.
- Install AutoSock (Fabric Snow Chain) only in pairs and on the rear tires.
- If you hear noise caused by chains contacting the body, retighten the chains to prevent contact with the vehicle body.
- To prevent body damage, retighten the chains after driving 0.3-0.6 mi. (0.5-1.0 km).
- Do not use tire chains on vehicles equipped with aluminum wheels. If unavoidable, use AutoSock (Fabric Snow Chain).

# **Trailer Towing**

Towing a trailer requires experience. The combination of the vehicle and trailer itself is not as responsive as the vehicle by itself. Towing a trailer also requires additional equipment and adequate planning before a trip. Plan your trip according to the speed limits for towing a trailer that may differ from country to country. Always follow the posted speed limits while towing a trailer. Remember that driving your vehicle with a trailer is different from normal driving. Driving with a trailer causes changes to acceleration, braking, handling and stability, and energy efficiency. For safety of you and passengers, do not overload your vehicle or trailer. Refer to the table in this section for the maximum towing capacity and payload.

This section contains important trailering recommendations and safety rules. Many of these recommendations are important considerations for the safety of you and your passengers. Be sure to read this section carefully and plan ahead before towing a trailer.



### WARNING

To prevent serious injury or death:

- If you do not use the correct equipment and/or drive improperly, you can lose control
  of the vehicle when you are pulling a trailer. For example, if the trailer is too heavy, the
  braking performance may be reduced. You and your passengers could be seriously or
  fatally injured. Pull a trailer only if you have followed all the steps in this section.
- Before towing, make sure the total trailer weight, Gross Combination Weight (GCW), Gross Vehicle Weight (GVW), Gross Axle Weight (GAW) and trailer tongue load are all within the limits.



- Always have your eyes on the road when towing a trailer. When a trailer is connected
  to the tow hitch harness installed to your vehicle, the following functions are turned off
  automatically:
  - Forward/Side Safety function of Forward Collision-Avoidance Assist
  - Lane Keeping Assist
  - Blind-Spot Collision-Avoidance Assist
  - Safe Exit Assist
  - Lane Following Assist
  - Highway Driving Assist
  - Rear Cross-Traffic Collision- Avoidance Assist
  - Reverse Parking Distance Warning
  - Parking Collision-Avoidance Assist
  - Remote Smart Parking Assist

For more information on each function, refer to chapter 7.

The tow hitch harness installed to your vehicle must be a genuine HYUNDAI parts. For more information, consult an authorized HYUNDAI dealer products.

- If a trailer or hitch mounted carrier is attached, it may adversely affect the performance of the rear corner radar.
- If a trailer, carrier or other attachment is installed around the rear corner radar, Blind-Spot Collision-Avoidance Assist, Safe Exit Warning, Rear Cross-Traffic Collision-Avoidance Assist may not operate properly, or it may operate unexpectedly.

#### NOTICE

- Do not install any equipment on the vehicle that blocks the license plate and cannot be easily removed or repositioned.
- When a trailer is not used, detach it from the vehicle so that the license plate is visible.

### If You Decide to Pull a Trailer

- Consider using a sway control. You can ask a trailer hitch dealer about sway control.
- Hyundai recommends that you contact an authorized HYUNDAI dealer for further information on additional requirements such as towing kit etc.
- Do not exceed 60 mph (100 km/h) or the posted towing speed limit, whichever is lower, when towing a trailer. Note that towing speed limits differ by country. Always be aware of the posted towing speed limit.
- Do not exceed 45 mph (70 km/h) or the posted towing speed limit, whichever is lower on a long uphill grade.
- Trailer instability is more likely to occur when descending steep or long downhill grades. Pay close attention and slow your vehicle speed when descending a long downhill grade. Allow more time and distance for braking and do not brake suddenly. Use the Paddle Shifter - (Regenerative Braking System in ECO mode or manual shift mode in SPORT mode) to reduce your vehicle speed and also to help prevent brakes from overheating.

Carefully observe the weight and load limits provided in the following pages.

### Towing load limits

Your vehicle can tow a trailer if you carefully observe the towing load limits, use proper equipment, and follow the towing guidelines. Check the load limits before driving.

#### Total trailer weight

Do not exceed the maximum allowable weight of the trailer, cargo, and everything in or on it. For more information, refer to the 'Reference Weight and Distance when Towing a Trailer' section in chapter 10.

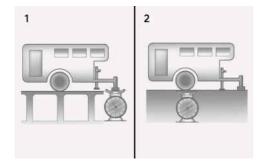


# MARNING

Exceeding the load limit or improperly loading your vehicle and trailer can cause a collision, resulting in serious injury or death.

Be sure to check the loading of your vehicle and trailer carefully before driving.

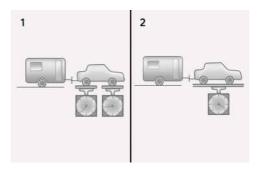
# Trailer weight



- 1. Tongue load
- 2. Total trailer weight

Check if the total load is within limits at a public scale. If a public scale is not available, add the estimated weight of your cargo load to the weight of your trailer (as specified by your trailer manufacturer). In addition, measure the tongue load with an appropriate scale or tongue gauge, or estimate it based on the cargo distribution.

### Tongue load



- 1. Gross axle weight
- 2. Gross vehicle weight

The tongue load is extremely important when setting up your trailer for towing with your vehicle. Excessive tongue load reduces front tire traction and steering control. For example, too little tongue load can make the trailer unstable, causing the trailer to sway because the weight of the trailer is shifted to the rear. The tongue load measured at the hitch when fully loaded should be within 10-15 % of the total weight of the trailer. Be sure to check the load of your vehicle and trailer before driving. Check if the total load is within limits at a public scale. In addition, measure the tongue load with an appropriate scale or tongue gauge. If a public scale is not available, estimate the weight of your cargo load and add the value to the weight of your trailer (as specified by the trailer manufacturer). Refer to the trailer's manual for additional information. Never exceed the gross vehicle weight rating (GVWR) for your vehicle.

### How to weigh the trailer loads at a public scale

Fully load the vehicle and trailer before going to the public scale. You and passengers should remain in the vehicle when performing the measurement.

- 1. Measure the front gross axle weight.
- 2. Measure the gross vehicle weight.
- 3. Measure the rear gross axle weight.
- 4. Measure the gross combined weight (vehicle and trailer).
- 5. Measure the hitched trailer weight.
- 6. Measure the unhitched trailer weight.

To calculate the tongue load, subtract 5 from 6.

After you have loaded your trailer, weigh the trailer and then the tongue separately, to see if the weights are proper. If not, you can correct them simply by moving some items around in the trailer.

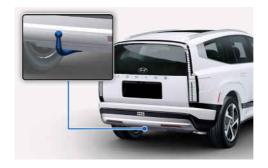


To prevent serious injury or death:

- Never load a trailer with more weight in the rear than in the front. The front should be loaded with about 60 % of the total trailer load. The rear should be loaded with about 40 % of the total trailer load.
- Never exceed the maximum weight limits of the trailer or trailer towing equipment.
   Check weights and loading at a commercial scale or highway patrol office equipped with scales.

### **Trailer Towing Equipment**

#### Hitches



- The bumpers on your vehicle are not intended for hitches. Do not attach rental hitches
  or other bumper-type hitches to them. Use only a frame mounted hitch that does not
  attach to the bumper.
- Any part of the rear license plate or lighting devices of the vehicle must not be obscured by the mechanical coupling device. If the rear number plate and/or lighting devices can be obscured partially by any part of the mechanical coupling device, mechanical coupling devices that cannot be easily removed or repositioned without use of any tools, except an easily operated (an effort not exceeding 20 Nm (15 lbf.ft) release key that is supplied by the manufacturer of the coupling device, are not permitted for use. Note that the mechanical coupling device that is fitted and not used must always be removed or repositioned if the rear number plate and/or rear lighting devices are obscured by any part of the mechanical coupling device.
- A HYUNDAI trailer hitch accessory is available at an authorized HYUNDAI dealer.

#### NOTICE

Make sure that all equipment is properly installed and maintained, and that it meets your country's regulations. Hyundai recommends that you have all trailer hitch equipment installed at an authorized HYUNDAI dealer with factory-recommended accessory parts that are specifically designed for your vehicle.

### Safety chains

Always attach chains between your vehicle and your trailer.

Instructions about safety chains may be provided by the hitch manufacturer or trailer manufacturer. Follow the manufacturer's recommendation when attaching safety chains. Always leave just enough slack so you can turn with your trailer. And, never allow safety chains to drag on the ground.

#### Trailer brakes

Your country's regulations may require trailers to have their own braking system if the loaded weight of the trailer exceeds certain minimums that can vary from country to country. Read and follow the instructions for the trailer's braking system when it is installed, adjusted, and maintained properly. Never attempt to tap into your vehicle's hydraulic braking system.



# 🛕 WARNING

Do not use a trailer with its own brakes unless you are absolutely certain that you have properly set up the brake system. This is not a task for amateurs. Use an experienced, competent trailer shop for this work.

### **Driving with a Trailer**

Towing a trailer requires a certain amount of experience. Before driving, acquaint yourself with the feel of handling and braking with the added weight of the trailer. And always keep in mind that the vehicle you are driving is now longer and not nearly as responsive as your vehicle is by itself.

Before you start, check the trailer hitch and platform, safety chains, electrical connector(s), lights, tires, and brakes.

During your trip, occasionally check the load is secure, and that the lights and trailer brakes are still working.

# Following distance

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

# Passing distance

You need more passing distance when you are towing a trailer. Because of the increased vehicle length, you may need to go much farther beyond the passed vehicle before you can return to your lane.

# Backing up

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

# Making turns

When you are turning with a trailer, make wider turns than normal. Do this so your trailer does not strike soft shoulders, curbs, road signs, trees, or other objects. Avoid jerky or sudden maneuvers. Signal well in advance.

### Turn sianals

When you tow a trailer, your vehicle has to have a different turn signal flasher and extra wiring. The green arrows on your instrument panel will flash whenever you signal a turn or lane change. Properly connected, the trailer lights will also flash to alert other drivers you're about to turn, change lanes, or stop.

When towing a trailer, the green arrows on your instrument panel flashes for turns even if the bulbs on the trailer are burned out. Thus, you may think drivers behind you are seeing your signals when, in fact, they are not. It's important to check occasionally to make sure the trailer bulbs are still working. Check the lights every time you disconnect and then reconnect the wires.



### MARNING .

Do not connect a trailer lighting system directly to your vehicle's lighting system. Use an approved trailer wiring harness. Failure to do so may result in damage to the vehicle electrical system and/or personal injury. Contact an authorized HYUNDAI dealer for assistance.

# Driving on hills

Reduce speed and set to a higher regenerative braking system (paddle shifter) before you start down a long or steep downgrade. Otherwise, you might have to use your brakes so much that they would get overheated and may not operate efficiently.

If your trailer weighs more than the maximum trailer weight without trailer brakes and you have a reduction gear, drive in D (Drive) when towing a trailer.

Operating your vehicle in D (Drive) when towing a trailer can minimize heat build-up and extend the life of your reduction gear.

#### NOTICE

To prevent motor overheating:

If you tow a trailer with the maximum gross vehicle weight and maximum trailer weight, it can cause the motor to overheat. When driving in such conditions, reduce vehicle speed or stop driving to allow the motor to cool down. You may proceed once the motor has cooled sufficiently.

#### NOTICE

When towing a trailer, your vehicle speed may be much slower than the general flow of traffic, especially when climbing an uphill grade. Use the right hand lane when towing a trailer on an uphill grade. Choose your vehicle speed according to the maximum posted speed limit for vehicles with trailers, the steepness of the grade, and your trailer weight.

# Parking on hills

Generally, if you have a trailer attached to your vehicle, you should not park your vehicle on a hill.

If you ever have to park your trailer on a hill:

1. Pull the vehicle into the parking space. Turn the steering wheel in the direction of the curb (right if headed down hill, left if headed up hill).

- 2. Shift the gear to P (Park).
- 3. Apply the parking brake and shut off the vehicle.
- 4. Place wheel chocks under the trailer wheels on the down hill side of the wheels.
- 5. Start the vehicle, hold the brakes, shift to neutral, release the parking brake and slowly release the brakes until the trailer chocks absorb the load.
- 6. Reapply the brakes and parking brake.
- 7. Shift the gear to P (Park) when the vehicle is parked on an uphill grade and in R (Reverse) on a downhill.
- 8. Shut off the vehicle and release the vehicle brakes but apply the parking brake.



### WARNING

To prevent serious injury or death:

- Do not get out of the vehicle without applying the parking brake firmly. If you have left
  the vehicle running, the vehicle may move suddenly. You and others may be seriously
  or fatally injured.
- Do not apply the accelerator pedal to hold the vehicle on an uphill.

### Driving the vehicle after it has been parked on a hill

- 1. With the gear in P (Park) or N (Neutral), apply your brakes and hold the brake pedal down while you:
  - · Start your vehicle.
  - · Shift into gear.
  - · Release the parking brake.
- 2. Slowly remove your foot from 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 a Trailer**

Your vehicle needs servicing more often when you regularly pull a trailer. Important items to pay particular attention to include a reducer gear fluid, axle lubricant, and cooling system fluid. Brake condition is another important item to frequently check. If you are trailering, it is a good idea to review these items before you start your trip. Do not forget to maintain your trailer and hitch. Follow the maintenance schedule that accompanies your trailer and check it periodically. Preferably, conduct checking at the start of each day's driving. Most importantly, all hitch nuts and bolts must be tight.

#### NOTICE

To prevent vehicle damage:

- Due to higher load during trailer usage, overheating might occur on hot days or during uphill driving. If the coolant gauge indicates over-heating, switch off the air conditioner and stop the vehicle in a safe area to cool down the motor.
- When towing, check reduction gear fluid more frequently.

# 7. Driver Assistance System

This chapter explains how to use the driver assistance features.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to vour vehicle.
- · Due to the infotainment software version, the description of each function of the driver assistance system may differ from the owner's manual.
- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.

# **Driver Assistance System Information**

### **Safety Precautions**

Be sure to read and understand the operation of each function before use.



#### WARNING

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

To prevent serious injury or death:

- Never attempt to activate any driver assistance system by intentionally driving toward people, animals, objects, or other vehicles.
- · Always pay attention to road and traffic conditions while driving. Brake and steer as needed to avoid collisions. Do not solely rely on the driver assistance system.
- Only change the settings after parking your vehicle at a safe location.
- · Do not use driver assistance system when towing a trailer or using a hitch mounted carrier.
- In case of an emergency while a driver assistance system is operating, control your vehicle appropriately. The braking and steering system of the vehicle operates normally even when the driver assistance system malfunctions.



- Driver assistance system may not operate properly when the detecting sensors are obscured or damaged. Before using the driver assistance system, refer to the safety precautions and location of the sensors.
- The braking and steering function of the driver assistance system operates properly
  only when the vehicle braking and steering system is operating normally. Before
  driving, check whether any braking or steering system warning light is illuminated and
  maintain normal operation through proper maintenance.
- Always be aware of your surroundings. Depending on the road and driving conditions, driver assistance system may warn the driver late, may not warn the driver, or operate unnecessarily.
- The driver should control the vehicle after a braking or steering event of a driver assistance system since the braking or steering automatically ends in a few seconds.
- Always be aware of your vehicle condition and surroundings even though a warning
  message or an audible warning does not appear or sound. When another system's
  warning message appears or audible warning sounds, some driver assistance system
  may not warn you.
- Keep the media volume to an appropriate level, and always be aware of the vehicle condition. You may not hear the audible warning of the driver assistance system if the surrounding environment is too noisy.
- Driver assistance system may not operate temporarily if there is interference from strong electromagnetic waves.
- Driver assistance system may not operate for a few seconds right after your vehicle is started or when the sensor or the infotainment system is being initialized.
- Driver assistance system may not operate properly when multiple switches or buttons are operated at the same time. Operate each switches and buttons properly in accordance with the function operation of each system.

### **Driver Assistance System Warnings and Indicators**

The driver assistance system warnings and indicators appear on the cluster display.

- The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the settings menu.
- For more information, refer to the 'Cluster Display View Modes' section in chapter 4.

#### Status indicators

The driver assistance system operating status appears at the top area of the cluster display.



2C ADASclusterdisplay

The Manual Speed Limit Assist, Intelligent Speed Limit Assist, Lane Keeping Assist, Smart Cruise Control, Navigation-based Smart Cruise Control, Lane Following Assist, and

Highway Driving Assist indicator always appears when each function is operating. For more information, refer to each system information in this chapter.

# Driving Assist view

The current status of the driver assistance system appears when the Driving Assist view is selected from the cluster display view modes.

 The operation status of driver assistance system also appears on the Head-Up Display (if equipped). For more information, refer to the 'Head-Up Display (HUD)' section is chapter 5.

# System warnings

The warning messages of driver assistance system appears on the cluster display.



2C\_FCABasicEmergencyBrakingInfo

The warning lights of each operating system (Forward Safety  $\underset{\leftarrow}{*}$ , Emergency Steering  $\underset{\leftarrow}{*}$ , Lane Safety  $\underset{\leftarrow}{/}$ , Intelligent Speed Limit Assist  $\underset{\leftarrow}{}$ , and Inattentive Driving  $\underset{\leftarrow}{}$  warning light) also illuminates on the instrument cluster. For more information, refer to each system information in this chapter.

# System malfunction warning



2C\_CheckDrivingAssistWarning

When the driver assistance system is not working properly, a warning message appears, the master  $\wedge$  warning light illuminates, and the malfunctioning system's warning light illuminates on the instrument cluster. Have your vehicle inspected by an authorized HYUNDAI dealer.

• You can check the warning message in the Utility view mode on the cluster display.

# System disabled warning

Front view camera obscured warning example



2C CameraDisableWarning

When the front windshield where the front view camera is located, radar cover, bumper (if equipped), or ultrasonic sensor is covered with foreign material, such as snow or rain, it can reduce the detecting performance and temporarily limit or disable the driver assistance system.

If this occurs, a warning message and the master  $\triangle$  warning light, and the disabled system's warning light appears on the instrument cluster, but it is not a malfunction. The system operates properly when snow, rain or foreign material is removed. Always keep the sensors clean.

• You can check the warning message in the Utility view mode on the cluster display. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

Parking Distance Warning example

2C\_PDWInfo\_2

 When the Rear Cross-Traffic Collision-Avoidance Assist, Parking Distance Warning, and Reverse Parking Collision-Avoidance Assist is operating, if the function is not operating properly or the ultrasonic sensor is obscured, the ♠ warning light may illuminate in the direction of the corresponding sensor.



- Even though the warning message or warning light does not appear on the instrument cluster temporarily, driver assistance system may not properly operate.
- Driver assistance system may not operate properly in open areas where no objects are detected (for example, open terrain, empty parking lot, etc.) or when the detecting sensors are obscured right after the vehicle is turned on.
- With the condition of blockage or malfunctioning maintained, driver assistance system may not operate properly even if the vehicle is restarted.

### **Driver Assistance System Settings**

### System settings

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



2C ADASSettings

- To see the driver assistance system settings in a list, press the ≡ button.
- Due to the infotainment software version, the description of each function of the driver assistance system may differ from the owner's manual. In this case, refer to the manual provided in the infotainment system and the quick reference guide.
- When the vehicle is restarted, each system maintains its last setting unless stated otherwise.



### CAUTION

- For your safety, only change the settings after parking the vehicle at a safe location.
- Always check the settings of the driver assistance system before driving.
- For your safety, read and familiarize yourself with each system before setting.

# Warning methods

The warning methods can be set by selecting the  $\mathfrak{A}$  icon from the infotainment system.



2C WarningTypeSetInfo

- Warning Volume: The warning volume can be adjusted.
- Haptic Warning: The steering wheel vibration can be set.
- Lane Safety Warning Sound: Yon can turn on or off the Lane Safety Warning Sound when the Haptic Warning is on.
- · Blind-Spot Safety Warning Sound: Blind-Spot Safety Warning Sound can be turned off separately.
- Driving Safety Priority: Your vehicle lowers all other audio volumes when the driver assistance system warning sounds.
- Parking Safety Priority: Your vehicle lowers all other audio volumes when a parking assist view is active.

#### NOTICE

- If you change the warning methods, the warning methods of other Driver assistance systems may change.
- When the vehicle is restarted, the warning methods maintains its last setting.
- The setting menu may not be available for your vehicle depending on the vehicle features and specifications.
- The Lane Safety Warning Sound can only be set when the Haptic Warning is on.

# Forward Collision-Avoidance Assist (FCA)

FCA helps avoid possible collision by detecting and monitoring a vehicle, motorcyclist, pedestrian, or cyclist ahead or around your vehicle while driving. FCA warns the driver with a warning message, warning sound, etc., or assists with braking or steering your vehicle according to the surroundings.



### CAUTION

When driving at night, the motorcyclist recognition performance is degraded, so FCA may be temporarily limited or may not work.

#### NOTICE

A motorcyclist refers to the driver riding the following powered two-wheeler.

- Mopeds with 50 cc and restricted top speeds
- Motorcycles

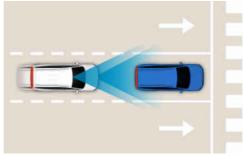
### **FCA Operation**



2C FCABasicInfo

- When FCA operates, Forward Safety 🛳 warning light or Emergency Steering 🗷 warning light blinks, a warning message appears on the cluster, an audible warning sounds and the steering wheel vibrates.
- Press the hazard warning flasher to turn off the audible warning of the collision warning or emergency braking.
- If the vehicle stops due to collision warning, emergency braking, or emergency steering, a warning message appears on the instrument cluster.

#### Basic function



2C FCABasicFunction

While driving, FCA Basic function helps avoid a collision according to the speed of your vehicle and the vehicle, motorcyclist, pedestrian, or cyclist ahead by warning or applying emergency braking.

- · Vehicle or motorcyclist:
  - The function operates with a strong braking power when there is a risk of collision, the vehicle ahead is moving, and your vehicle speed is between about 6-80 mph (10-130 km/h) or the vehicle ahead is not moving, and your vehicle speed is between about 6-53 mph (10-85 km/h).
    - If FCA judges that avoiding a collision is difficult even by changing the driving lane, braking is assisted more earlier when your vehicle speed is between about 6-62 mph (10-100 km/h).
  - The function operates with a weak braking power or a warning appears when there is a risk of collision and your vehicle speed is between about 6-125 mph (10-200 km/h).
- · Pedestrian or cyclist:
  - Emergency braking may operate when there is a risk of collision and your vehicle speed is between about 6-40 mph (10-65 km/h).
  - Collision warning may operate when there is a risk of collision and your vehicle speed is between about 6-53 mph (10-85 km/h).

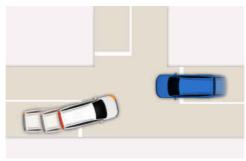
Braking control ends about 2 seconds after your vehicle is stopped following an emergency braking event. For your safety, the driver should depress the brake pedal immediately and check the surroundings.



#### CAUTION

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

### Junction Turning function



2C\_FCAJunctionTurningFunction

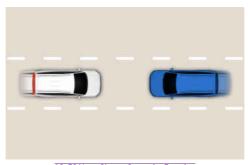
When turning left at a crossroad with the turn signal on, Junction Turning function helps avoid a collision with an oncoming vehicle or motorcyclist in an adjacent lane by warning or applying emergency braking.

The function operates when:

- Your vehicle speed is between about 6-19 mph (10-30 km/h)
- Oncoming vehicle speed is between about 15-44 mph (25-70 km/h)
- Oncoming motorcyclist or cyclist speed is between about 9-44 mph (15-70 km/h)(It also operates when your vehicle turns right.)

Braking control ends about 2 seconds after your vehicle is stopped following an emergency braking event. For your safety, the driver should depress the brake pedal immediately and check the surroundings.

# **Direct Oncoming function**



 ${\tt 2C\_FCALaneChangeOncomingFunction}$ 

When there is a risk of collision with a vehicle or motorcyclist approaching from the opposite side, Direct Oncoming function helps reduce the speed by warning or applying emergency braking.

The function operates when:

- Your vehicle speed<sup>\*</sup> is between about 19-80 mph (30-130 km/h)
- Oncoming vehicle or motorcyclist speed is about above 6 mph (10 km/h)
- \*: The function warns the driver if there is a risk of collision, even when your vehicle speed is between about 6-80 mph (10-130 km/h).

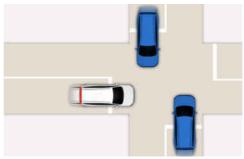
Braking control ends about 2 seconds after your vehicle is stopped following an emergency braking event. For your safety, the driver should depress the brake pedal immediately and check the surroundings.



# CAUTION

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

### Junction Crossing function



2C FCAJunctionCrossingFunction

When crossing an intersection, Junction Crossing function helps avoid a collision with an oncoming vehicle on the left or right side by warning or applying emergency braking.

The function operates when:

- Your vehicle speed is between about 6-34 mph (10-55 km/h)
- Crossing vehicle speed is between about 6-25 mph (10-40 km/h)
- The function warns the driver if there is a risk of collision, even when crossing vehicle speed is between about 6-37 mph (10-60 km/h)

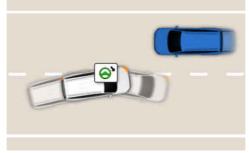
Braking control ends about 2 seconds after your vehicle is stopped following an emergency braking event. For your safety, the driver should depress the brake pedal immediately and check the surroundings.



### CAUTION

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

### Lane-Change Oncoming function



2C\_FCALaneOvertakingOncomingFunction

When changing lanes, Lane-Change Oncoming function helps avoid a collision with an oncoming vehicle or motorcyclist by warning or assisting the driver's steering.

The function operates when:

- Your vehicle speed is between about 25-90 mph (40-145 km/h)
- Oncoming vehicle or motorcyclist speed is above about 6 mph (10 km/h)
- · Relative speed with your vehicle and the oncoming vehicle or motorcyclist is about below 124 mph (200 km/h)
- · Both lane markings are detected



### WARNING

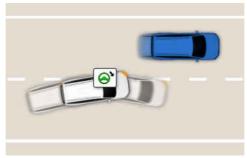
Lane-Change Oncoming function only operates when both lane markings are detected.



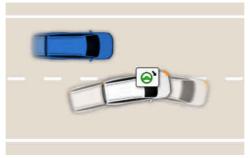
# CAUTION

If there is a risk of collision with a surrounding vehicle, motorcyclist, pedestrian, or cyclist due to emergency steering, only a collision warning is provided.

# Lane-Change Side function



2C\_FCALaneChangeSideFunction



2C FCALaneChangeSideFunction 2

When changing lanes, Lane-Change Side function helps avoid a collision with the vehicle or motorcyclist ahead in the next lane by warning or assisting the driver's steering.

The function operates when:

- Your vehicle speed is between about 25-90 mph (40-145 km/h).
- · Both lane markings are detected



### MARNING

- · Lane-Change Side function does not operate if the vehicle or motorcyclist in the next lane is not moving.
- The detection range is set to a standard road width. On a narrow or wide road, the Lane-Change Side function may detect a vehicle or motorcyclist two lanes over or may not detect a vehicle or motorcyclist in the next lane properly.
- Lane-Change Side function may be canceled under the following circumstances:
  - Your vehicle enters the next lane by a certain distance.
  - You steer away from the collision risk.
  - The steering wheel is sharply steered.
  - The brake pedal is depressed.
  - FCA Emergency braking is operating.
- After Lane-Change Side function operation or lane change, you must drive to the center of the lane. Lane-Change Side function does not operate if the vehicle is driven close to one side of the lane.
- · Lane-Change Side function only operates when both lane markings are detected.

#### NOTICE

- If there is an approaching vehicle or motorcyclist in the rear side, the warning light on the side view mirror also illuminates.
- If there is a risk of additional collision due to emergency steering, Lane-Change Side function only provides a collision warning.

### Evasive Steering Assist function



2C\_FCAEvasiveSteeringAssistFunction

When there is a risk of collision with a subject ahead in the same lane, Evasive Steering Assist function helps avoid a collision by warning or assisting the driver's steering.

**Emergency steering (Driver steering assist)** 

If there is a risk of collision with a vehicle, motorcyclist, pedestrian, or cyclist in front, the steering is assisted to help prevent collision when the driver steers the vehicle to avoid collision.

The function operates when:

• Your vehicle speed is between about 25-53 mph (40-85 km/h).

**Emergency steering (Evasive steering assist)** 

If there is high risk of collision with a motorcyclist, pedestrian or cyclist in front, and the vehicle speed to operate emergency braking has exceeded, the steering is assisted to help prevent collision when there is space to avoid collision in the driving lane.

The function operates when:

- Your vehicle speed is between about 40-47 mph (65-75 km/h).
- Pedestrian or cyclist is moving in the same direction as your vehicle, or in the opposite direction
- · Both lane markings are detected



### CAUTION

- The steering wheel may turn automatically when emergency steering is operating.
- Emergency steering automatically cancels when risk factors disappear. If necessary, the driver must steer the vehicle.
- Emergency steering may not operate or may cancel during operation if the steering wheel is held tight or steered in the opposite direction.
- · When steering is assisted to avoid collision with a vehicle, motorcyclist, pedestrian, or cyclist, Evasive Steering Assist may be canceled if a collision with other object (vehicle, motorcyclist, pedestrian, or cyclist) is expected.
- · Evasive Steering Assist may not operate if space to avoid collision in the driving lane is insufficient.

### FCA Settings



2C\_ForwardSafetySettings

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

- When Forward Safety is selected, Basic function, Junction Turning function and Direct Oncoming function operate. When Forward Safety is deselected, the functions turn off. The Forward Safety \* warning light illuminates on the cluster.
- Select Forward Safety Warning Timing to change the initial warning activation time for FCA. The warning time can be set to either **Standard** or **Late**.
  - Standard: Use in normal driving conditions. If the Forward Safety Warning Timing seems sensitive, change it to Late.
  - Late: FCA warning appears more slowly.
- The setting for Forward Safety Warning Timing does not apply for Forward/Side Safety.
- When Forward Cross-Traffic Safety is selected, Junction Crossing function operates. Forward Safety should be activated for Forward Cross-Traffic Safety to activate.
- When Forward/Side Safety is selected, Lane-Change Oncoming function, Lane-Change Side function, and Evasive Steering Assist function operate. When Forward/Side **Safety** is deselected, the functions turn off. The Emergency Steering & warning light illuminates on the cluster.

The driver can monitor FCA on/off status from the Settings menu. If the Forward Safety so or Emergency Steering warning light remains on when Forward Safety or Forward/Side Safety is on, have your vehicle inspected by an authorized HYUNDAI dealer.



### WARNING

When the vehicle is restarted, Forward Safety, Forward Cross-Traffic Safety, and Forward/ Side Safety is always selected. If you deselect to turn off the function, FCA cannot assist you. The driver should always be aware of the surroundings and drive safely.



### CAUTION

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

# Warning methods

You can set the following Warning methods for FCA:

- Warning volume
- · Haptic warning
- · Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.



# **MARNING**

Take the following precautions when using FCA:

- Only change the settings after parking your vehicle at a safe location.
- The driver has the responsibility to control the vehicle. Do not solely depend on FCA. Rather, maintain a safe distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- FCA does not operate in all situations or cannot avoid all collisions.
- FCA may stop working, may not operate properly, or may operate unnecessarily depending on the road conditions and the surroundings. Always check your surroundings to prevent dangerous situations.
- · Never deliberately operate FCA on people, objects, etc. It may cause serious injury or death.
- FCA may not operate if the driver depresses the brake pedal to avoid a collision.
- During FCA operation, passengers and loose objects in the vehicle may shift and injure passengers. Always have the seat belt on and keep loose objects secured.
- If any other system's warning message appears or audible warning is generated, FCA warning message may not appear and audible warning may not be generated.
- · You may not hear the warning sound of FCA if the surrounding is noisy. Adjust other sounds in the vehicle to an appropriate level and always be aware of your surroundings.
- · Even if there is a problem with FCA, the vehicle's basic braking and steering functions normally.
- During emergency braking, braking control by FCA automatically cancels when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.



- Depending on the condition of the vehicle, motorcyclist, pedestrian, or cyclist in front and the surroundings, the speed range or detection range to operate FCA may reduce.
   FCA operation may be limited or may not operate.
- FCA operates under certain conditions by judging the risk level based on the condition of the oncoming vehicle, motorcyclist, or cyclist, driving direction, speed and surroundings.
- Only FCA warning and collision mitigation are possible depending on the detectable distance.
- FCA may be limited or disabled if the vehicle speed is too fast or the speed difference with the other vehicle, motorcyclist, or cyclist is large.
- When a collision with a surrounding vehicle is expected, Lane-Change Oncoming, Lane-Change Side, and Evasive Steering Assist may not assist you with steering but only warn you of a collision (if equipped).

#### NOTICE

In a situation where collision is imminent, braking may be assisted by FCA when braking is insufficient by the driver.

#### **FCA Malfunction and Limitations**

#### FCA malfunction

When FCA or related component malfunctions, a warning message, the Master  $\triangle$  warning light, and the Forward Safety  $\clubsuit$  or Emergency Steering  $\cancel{\approx}$  warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

# Detecting sensors

FCA uses the following sensors:

- Front view camera
- · Front radar
- · Front corner radar
- Rear corner radar

For more information, refer to the 'Sensor Information' section in this chapter.

#### FCA limitations

FCA may not operate properly, or it may operate unexpectedly under the following circumstances:

- Only part of the vehicle, motorcyclist, pedestrian or cyclist is detected
- The vehicle or motorcyclist in front is a bus, heavy truck, truck with an unusually shaped cargo, trailer, etc.

- The vehicle or motorcycle in front has no tail lights, tail lights are located unusually, etc.
- In low light conditions, the tail lamps of the front vehicle or motorcycle are turned off or not bright.
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visible, etc.
- · The front vehicle's ground clearance is low or high
- A vehicle, motorcyclist, pedestrian, or cyclist suddenly cuts in front
- A material is near that reflects very well on the front radar, such as a guardrail, nearby vehicle, etc.
- The cyclist in front is on a bicycle made of material that does not reflect on the front radar
- The vehicle or motorcyclist in front is detected late
- The vehicle or motorcyclist in front is suddenly blocked by an obstacle
- The vehicle or motorcyclist in front suddenly changes lane or suddenly reduces speed
- The vehicle or motorcyclist in front is at an angle to your vehicle
- · The vehicle in front is covered with snow
- · You are departing or returning to the lane
- · Your vehicle is unstably driving
- You are on a curve or a roundabout and the vehicle or motorcyclist in front is not detected
- · You are continuously driving in a circle
- The vehicle in front has an unusual shape
- The vehicle in front is driving uphill or downhill
- The pedestrian or cyclist is not fully detected, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian or cyclist is wearing clothing or equipment that makes it difficult to detect
- The pedestrian or cyclist in front is moving very quickly
- The pedestrian or cyclist in front is short or is posing a low posture
- The pedestrian or cyclist in front is moving unsteadily or intersected with the driving direction
- There is a group of pedestrians, cyclists or a large crowd in front
- The pedestrian or cyclist is difficult to distinguish from the surroundings (wearing clothing that easily blends into the background, similarly shaped structure, etc.)
- You are passing by a pedestrian, cyclist, traffic signs, structures, etc., near the intersection
- You are driving in following places:
  - Driving through steam, smoke or shadow
  - Driving through a tunnel or iron bridge
  - Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
  - Driving in a parking lot

- Driving through a tollbooth, construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- Driving on an incline road, curved road, etc.
- Driving through a roadside with trees or streetlights
- Driving through a narrow road where trees or grass are overgrown
- Driving in an area where there is interference by electromagnetic waves, such as strong radio waves or electrical noise
- · The vehicle moves unstably or vibrates excessively
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Your vehicle is installed with a snow chain, spare tire or different size wheel.



2C. FrontViewImage

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

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

FCA may not operate properly, or it may operate unexpectedly under the following circumstances:

- Driving on a highway ramp
- Driving on a road where the guardrail or wall is in double structure
- The other vehicle drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity
- The speed of the other vehicle is very fast that it passes by your vehicle in a short time
- · Your vehicle passes by the other vehicle
- Your vehicle has started at the same time as the vehicle next to you and has accelerated
- The vehicle in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- The following object is detected:
  - A small motorcycle or bicycle
  - A vehicle such as a flat trailer

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

#### **Limitations of Evasive Steering Assist**

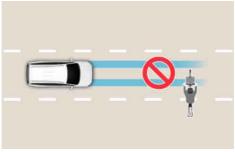
Evasive Steering Assist function may not work properly in the following situations when:

• The pedestrian or cyclist is positioned outside of the operating area.



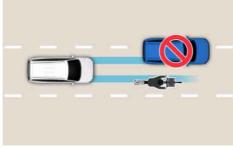
2C\_EvasiveSteeringAssist\_1

• The pedestrian or cyclist is moving laterally.



2C\_EvasiveSteeringAssist\_2

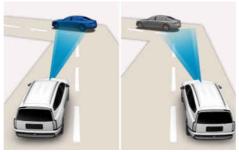
• The pedestrian or cyclist is positioned inside of the operating area, but there is not enough space available for evasive steering.



2C\_EvasiveSteeringAssist\_3



### · Driving on a curved road



2C\_SCCDrivingOnCurve

FCA may not detect a vehicle, motorcyclist, pedestrian, or cyclist in front of you when driving on curved roads, adversely affecting the performance of the sensors. This may not result in warning, braking assist or steering assist when necessary.

FCA may detect a vehicle, motorcyclist, pedestrian or cyclist in the next lane or outside the lane when driving on a curved road. If this occurs, FCA may unnecessarily warn the driver, assist emergency braking or emergency steering.

Always check the traffic conditions around the vehicle. If necessary, steer your vehicle and depress the brake pedal to reduce your driving speed.

### · Driving on an inclined road



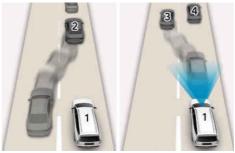
2C\_FCADrivingOnIncline

FCA may not detect a vehicle, motorcyclist, pedestrian, or cyclist in front of you while driving uphill or downhill, adversely affecting the performance of the sensors. This may not result in warning, braking assist or steering assist (if equipped) when necessary.

Also, vehicle speed may rapidly decrease when a vehicle, motorcyclist, pedestrian or cyclist ahead is suddenly detected.

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

## Changing lanes



2C FCAChangingLane

- 1. Your vehicle
- 2. Lane changing vehicle (into your lane)
- 3. Lane changing vehicle (out of your lane)
- 4. Same lane vehicle

When the vehicle or motorcyclist moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. FCA may not immediately detect the vehicle or motorcyclist when the vehicle changes lanes abruptly.

When the vehicle in front of you merges out of the lane, FCA may not immediately detect the vehicle that is now in front of you.

Always check the traffic conditions around the vehicle. If necessary, steer your vehicle and depress the brake pedal to reduce your driving speed.

### · Detecting vehicle



2C CameraRadarDetectingVehicle

If the vehicle in front of you has cargo that extends rearward from the cab or when the vehicle in front of you has higher ground clearance, additional special attention is required.

In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance. Always check the traffic conditions around the vehicle.

- When you are towing a trailer or another vehicle, turn off FCA for safety reasons.
- FCA may operate if an object that is similar in shape or characteristics to a vehicle, motorcyclist, pedestrian, or cyclist is detected.

- FCA does not operate on bicycles, or smaller wheeled objects, such as luggage bags, shopping carts, or strollers.
- FCA may be temporarily disabled if interfered by strong electromagnetic waves.
- FCA may not operate for about 15 seconds after the vehicle is started or the front view camera is initialized.

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

# Lane Keeping Assist (LKA)

While driving over a certain speed, LKA helps detect lane markings (or road edges) and may warn you if your vehicle leaves the lane without using the turn signal and may assist with steering to help prevent your vehicle departing from its travel lane.

### **Turning LKA On/Off**

With the vehicle on, press and hold the Lane Driving Assist  $\bigoplus \setminus$  button located on the steering wheel to turn the function on or off.



- When the operating condition of LKA are met, the cluster is illuminated with a green indicator.
- When the operating conditions are not met, a grey /=\ indicator is illuminated.
- When LKA is turned off, the /=\ indicator turns off
- When LKA is not working properly, the /=\ indicator turns yellow.

If the indicator remains illuminated after vehicle inspection, have your vehicle inspected by an authorized HYUNDAI dealer.

## **LKA Operation**



2C LaneDepartureWarning

To warn the driver that the vehicle is departing from the projected lane in front without activating the turn signal, the green indicator light blinks on the cluster, and the steering wheel makes adjustments to keep vehicle inside the lane.

If the vehicle is departing from the projected lane, an additional audible warning sounds and the steering wheel vibrates.

LKA operates under the following conditions:

- Your vehicle speed is about 40-120 mph (60-200 km/h)
- The lane markings (or road edges) are detected

#### **Precautions**

- You can steer your vehicle even when steering is assisted by LKA.
- It may require more or less force to turn the steering wheel when LKA is providing steering assistance.
- When lane markings (or road edges) are detected, the lane lines on the cluster changes from gray to white.
- When the lane markings (or road edges) are detected and Highway Lane Change Assist is on, the lane lines on the cluster may change to green (if equipped).
- For more information on instrument cluster settings, refer to the 'Cluster Settings' section in chapter 4.



#### WARNING

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



### 

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

### **LKA Settings**

## Lane safety

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

If Lane Safety is selected, LKA automatically assists the driver's steering when lane departure is detected to help prevent the vehicle from moving out of its lane. If Lane Safety is deselected, LKA turns off and the /a\ indicator light disappears on the instrument cluster.

 If you press and hold the Lane Driving Assist /⊕\ button and turn off LKA, Lane Safety also turns off.



#### WARNING

Always be aware of the surroundings. If **Lane Safety** is deselected, LKA does not assist you.



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

### Warning methods

You can set the following Warning methods for LKA:

- · Warning volume
- Haptic warning
- · Lane Safety Warning Sound
- · Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

#### **LKA Malfunction and Limitations**

#### LKA malfunction

When LKA or related component malfunctions, a warning message, the Master  $\triangle$  warning light and the yellow Lane Safety  $\triangle$  indicator light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

# Detecting sensors

LKA uses the following sensor:

· Front view camera

For more information, refer to the 'Sensor Information' and 'FCA limitations' section in this chapter.

#### LKA limitations

LKA may not operate properly or may operate unexpectedly under the following circumstances:

- The lane is contaminated or difficult to detect because:
  - The lane markings (or road edge) are covered with rain, snow, dirt, oil, etc.
  - The color of the lane marking (or road edge) is not distinguishable from the road
  - There are markings (or road edges) on the road near the lane or the markings (or road edges) on the road look similar to the lane markings (or road edge)
  - The lane marking (or road edge) is indistinct or damaged
  - The shadow is on the lane marking (or road edge) by a median strip, trees, guardrail, noise barriers, etc.
- The lane number increases or decreases, or the lane markings (or road edges) are crossing

#### 691 Driver Assistance System

- There are more than two lane markings (or road edges) on the road
- The lane markings (or road edges) are complicated or a structure substitutes for the lines, such as a construction area
- There are road markings, such as zigzag lanes, crosswalk markings and road signs
- The lane suddenly disappears, such as at the intersection
- The lane (or road width) is very wide or narrow
- · There is a road edge without a lane
- There is a boundary structure in the roadway, such as a tollbooth, sidewalk, curb, etc.
- The distance to the front vehicle is extremely short or the vehicle in front is covering the lane marking (or road edge)



#### MARNING

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

# **Blind-Spot Collision-Avoidance Assist (BCA)**

BCA helps detect approaching vehicles in the driver's blind spot areas and warn you of a possible collision with a warning light, warning sound, and warning message. If there is a collision risk when exiting a parallel space, BCA may assist with braking your vehicle to help avoid a collision.

### **BCA Operation**



2C SideMirrorWaringLamp

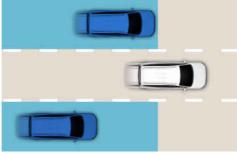


2C BCABrakingControl

BCA warns the driver that warning or emergency braking is activated as follows:

- The warning light on the side view mirror (or digital side mirror) illuminates
- The warning message appears on the cluster
- · An audible warning sounds
- · Head-Up Display (HUD) illuminates
- · The steering wheel vibrates

## Collision warning (while driving)



When a vehicle is detected in the rear blind spot area, the warning light illuminates on the side view mirror (or digital side mirror), a warning appears on the cluster, and HUD (if equipped) under following conditions:

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

Collision warning operates when the turn signal is turned on in the direction of the detected vehicle. The warning light blinks on the outside side view mirror (or digital side mirror), a warning appears on the cluster and HUD (if equipped), and an audible warning sounds under following conditions:

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



#### MARNING

- The detecting range of the rear corner radar is determined by a standard road width. On narrow roads, BCA may detect other vehicles two lane over and warn you. On wide roads, BCA may not be able to detect a vehicle driving in the next lane and may not warn you.
- · When the hazard warning flasher is on, the collision warning initiated by activating the turn signal may not operate.



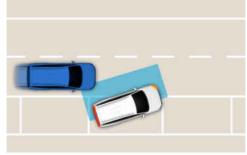
#### CAUTION

- The warning range may differ depending on the speed of your vehicle.
- If you pass other vehicles at high speeds, BCA may not warn you even when there is a vehicle in the blind spot area.
- The warning timing may differ depending on the speed of the vehicle approaching you at high speed.

#### NOTICE

Collision warning may occur when you turn left. Maintain a proper distance from other vehicles when turning.

# Collision-avoidance assist (while exiting parallel parking)



2C BCAOperation 3

When the driver turns the steering wheel about one turn to exit the vehicle forward, if there is a risk of collision, warning (with warning light, warning message, warning sound, and steering wheel vibration) and braking activates under the following conditions:

- Your vehicle speed: below 2 mph (3 km/h)
- Vehicle in the blind spot area: above 3 mph (5 km/h)

Braking control ends about 2 seconds after your vehicle is stopped following an emergency braking event. For your safety, the driver should depress the brake pedal immediately and check the surroundings.

### WARNING

- If any other system's warning message appears or audible warning is generated, BCA's warning message may not appear and audible warning may not be generated.
- · You may not hear the warning sound of BCA if the surrounding is noisy. Adjust other sounds in the vehicle to an appropriate level and always be aware of your surroundings.
- BCA may not operate if the driver applies the brake pedal to avoid a collision.
- When BCA is operating, braking control by the function automatically cancels when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.
- · During BCA operation, passengers and loose objects in the vehicle may shift and injure passengers. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with BCA, the vehicle's basic steering and braking performance operates properly.
- BCA does not operate in all situations and cannot avoid all collisions.
- BCA may warn the driver late or may not warn the driver depending on the road and driving conditions.
- Driver should maintain control of the vehicle at all times. Do not solely depend on BCA. Rather, maintain a safe distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately test BCA. It may cause serious injury or death.
- The brake control may not operate properly depending on the status of Electronic Stability Control (ESC).

Braking is not assisted and only a warning is provided when:

- The ESC warning light is on
- ESC is engaged in a different function

### **BCA Settings**

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

When Blind-Spot Safety is selected or the vehicle is restarted with Blind-Spot Safety selected, the warning light on the side view mirror blinks for three seconds.

When the vehicle is restarted with Blind-Spot Safety off, the 'Blind-spot safety system is **Off**' message appears on the instrument cluster.



# **CAUTION**

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

# Warning methods

You can set the following Warning methods for BCA:

- · Warning volume
- Haptic warning
- Blind-spot warning sound

Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.



#### WARNING

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

#### **BCA Malfunction and Limitations**

#### BCA malfunction

When BCA or related component malfunctions, a warning message and the Master A warning light appears on the instrument cluster. Also, when the rear view mirror is not working properly, a warning message and the Master A warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.



#### CAUTION

Turn off BCA when a trailer, carrier, or another attachment is installed. Remove the trailer. carrier, or another attachment to use BCA.

### Detecting sensors

BCA uses the following sensor:

Rear corner radars

For more information, refer to the 'Sensor Information' section in this chapter.



#### CAUTION

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

#### **BCA limitations**

BCA may not operate properly, or it may operate unexpectedly under the following circumstances:

- Driving on a highway ramp
- Driving on a road where the quardrail or wall is in double structure
- There is inclement weather, such as heavy snow, heavy rain, etc.
- The rear corner radar is covered with snow, rain, dirt, etc.
- · The temperature around the rear corner radar is high or low
- The rear corner radar is blocked by other vehicles, walls or pillars
- Driving on a highway ramp or driving through a tollbooth

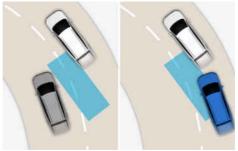
- The road pavement (or the peripheral ground) abnormally contains metallic components (for example, possibly due to subway construction)
- There is a fixed object near the vehicle, such as sound barriers, guardrails, central dividers, entry barriers, street lamps, signs, tunnels, walls, etc. (including double structures)
- Driving through a narrow road where trees or grass are overgrown
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving on a wet road surface, such as a puddle on the road
- The other vehicle drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity
- · The speed of the other vehicle is very fast that it passes by your vehicle in a short time
- · Your vehicle passes by the other vehicle
- · Your vehicle changes lane
- Your vehicle has started at the same time as the vehicle next to you and has accelerated
- The vehicle in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- · A trailer, carrier or other attachment is installed around the rear corner radar
- The bumper around the rear corner radar is covered with objects, such as a bumper sticker, bumper quard, bike rack, etc.
- The bumper around the rear corner radar is impacted, damaged or the radar is out of position
- Your vehicle is installed with a snow chain, spare tire or different size wheel.
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure installed with tires of different specification, etc.
- · The following object is detected:
  - A small motorcycle or bicycle
  - A vehicle such as a flat trailer
  - A big vehicle such as a bus or truck
  - A moving obstacle such as a pedestrian, animal, shopping cart or a baby stroller
  - A vehicle with low height such as a sports car

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

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



### · Driving on a curved road

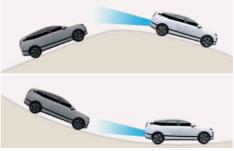


2C\_BCADrivingOnCurvedRoad

BCA may not operate properly when driving on a curved road. The function may not detect the vehicle in the next lane or the function may recognize a vehicle in the same lane.

Always pay attention to road and driving conditions while driving.

### · Driving on an inclined road



2C BCAInclinedRoad

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

#### · Driving where the road is merging/dividing

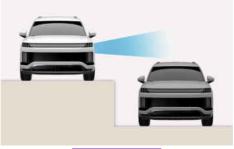


2C\_BCAMergingRoad

BCA may not operate properly when driving where the road merges or divides. The function may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions while driving.

· Driving where the heights of the lanes are different



2C\_BCAHeightDifference

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

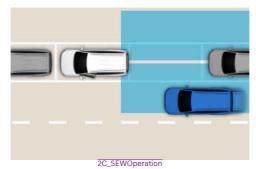
Always pay attention to road and driving conditions while driving.

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

# Safe Exit Warning (SEW)

### f Equipped

SEW helps detect a vehicle approaching in the rear corner of your vehicle, after the vehicle is stopped and a passenger opens a door.



**SEW Operation** 



SEW warns the driver with a warning message and an audible warning. The warning light on the side view mirrors also blinks to warn you.

# Collision warning when exiting vehicle

When an approaching vehicle from the rear is detected at the moment a door is opened, the 'Collision Warning' warning message appears on the instrument cluster, and an audible warning sounds.

SEW warns the driver when:

- Your vehicle speed: below 2 mph (3 km/h)
- Vehicle approaching from the rear: above 4 mph (6 km/h)

After the vehicle is turned off, SEW operates for about 3 minutes. However, SEW turns off immediately if the doors are locked.

- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other system's warning message appears or audible warning is generated, SEW's warning message may not appear and audible warning may not be generated.
- · You may not hear the warning sound of SEW if the surrounding is noisy. Adjust other sounds in the vehicle to an appropriate level and always be aware of your surroundings.
- SEW does not operate in all situations or cannot prevent all collisions.
- SEW may warn the driver late or may not warn the driver depending on the road and driving conditions. Always check vehicle surroundings.
- The driver and passengers are responsible for accidents that occurs while exiting the vehicle. Always check the surroundings before you exit the vehicle.

### **SEW Settings**

### Safe exit



With the vehicle on, select Setup > Vehicle > Driver Assistance > Driving Safety > Safe Exit from the Settings menu to turn on SEW and deselect to turn off the function.



#### WARNING

If Safe Exit is deselected, SEW cannot assist you. The driver should always be aware of his or her surroundings.



## CAUTION

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

# Warning methods

You can set the following Warning methods for SEW:

- · Warning volume
- · Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

#### **SEW Malfunction and Limitations**

#### SEW malfunction

When SEW or related component malfunctions, a warning message, the Master A warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle be inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.



### CAUTION

Turn off SEW when a trailer, carrier, or another attachment is installed. Remove the trailer, carrier, or another attachment to use SEW.

### Detecting sensors

SEW uses the following sensor:

Rear corner radar

For more information, refer to the 'Sensor Information' or 'BCA Malfunction and Limitations' section in this chapter.



#### A CAUTION

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

#### SEW limitations

SEW may not operate properly, or it may operate unexpectedly under the following circumstances:

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



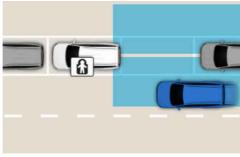
#### WARNING

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

# Safe Exit Assist (SEA)

### f Equipped

SEA helps detect a vehicle approaching in the rear corner of your vehicle, after the vehicle is stopped and a passenger opens a door. SEA may warn you with an audible warning and a warning message to help avoid a collision.



2C\_SEAOperation

### **SEA Operation**



2C SideMirrorWaringLamp

SEA warns the driver with a warning message and an audible warning. The warning light on the side view mirrors also blinks to warn you.

# Collision warning when exiting vehicle

When an approaching vehicle from the rear is detected at the moment a door is opened, the 'Collision Warning' warning message appears on the instrument cluster, and an audible warning sounds.

# SEA linked with Electronic child safety lock

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

#### SEA warns the driver when:

- Your vehicle speed: below 2 mph (3 km/h).
- Vehicle approaching from the rear: above 4 mph (6 km/h).

After the vehicle is turned off, SEA operates for about 3 minutes. However, SEA turns off immediately if the doors are locked.

- If a rear door is opened from the outside, it opens regardless of SEA operation.
- For more information on electric child safety lock (a) button, refer to the 'Electronic child safety lock' section in chapter 5.



#### WARNING

- If the driver presses the electronic child lock a button again within 10 seconds after
  the warning message appears, SEA judges that the driver has unlocked the doors
  acknowledging the rear status. The electronic child safety lock turns off (button
  indicator OFF) and the rear doors unlock. Always check the surroundings before turning
  off the electronic child safety lock button.
- If any other system's warning message appears or audible warning is generated, SEA warning message may not appear and audible warning may not be generated.
- · You may not hear the warning sound of SEA if the surrounding is noisy.
- SEA does not operate in all situations or cannot prevent all collisions.
- SEA may warn the driver late or may not warn the driver depending on the road and driving conditions. Always check vehicle surroundings.
- The driver and passengers are responsible for accidents that occurs while exiting the vehicle. Always check the surroundings before you exit the vehicle.
- Never deliberately operate SEA. Doing so may lead to serious injury or death.

### **SEA Settings**

#### Safe exit



2C ExitSafetySettings

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



#### WARNING

If **Safe Exit** is deselected, SEA cannot assist you. The driver should always be aware of his or her surroundings.

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

### Warning methods

You can set the following Warning methods for SEA:

- · Warning volume
- Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

#### **SEA Malfunction and Limitations**

#### SEA malfunction

When SEA or related component malfunctions, a warning message, the Master A warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.



### CAUTION

Turn off SEA when a trailer, carrier, or another attachment is installed. Remove the trailer, carrier, or another attachment to use SEA.

## Detecting sensors

SEA uses the following sensor:

· Rear corner radar

For more information, refer to the 'Sensor Information' or 'Blind-Spot Collision-Avoidance Assist (BCA)' section in this chapter.



#### CAUTION

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

#### SEA limitations

SEA may not operate properly, or it may operate unexpectedly under the following circumstances:

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



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

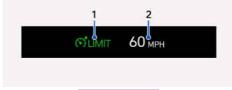
# **Manual Speed Limit Assist (MSLA)**

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

### **MSLA Operation**

If you drive over the preset speed limit, MSLA operates (set speed limit blinks and chime sounds) until the vehicle speed returns within the speed limit.

- When the vehicle speed decreases below the speed limit, the warning sound stops.
- You can check the status of MSLA on the Driving Assist view on the cluster display.



2C MSLAOverviewInfo

- 1. Speed Limit indicator
- 2. Set speed

### Setting speed limit



2C\_MSLAButton

- 1. Driving Assist button
- 2. +, switch
- 1. Press and hold the Driving Assist 👝 button at the desired speed.
  - The set speed and Speed Limit & LIMIT indicator appears on the cluster.
  - Press the Driving Assist ← button to turn MSLA off. The Speed Limit ♂LIMIT indicator goes off.
- 2. Push the + switch up or switch down, and release it at the desired speed.
  - A short push of the switch upward or downward will increase or decrease the set speed by 1 mph (1 km/h).
  - A long push of the switch upward or downward will increase or decrease the set speed by 5 mph (10 km/h).
  - If you would like to drive over the preset speed limit, the set speed limit blinks and a chime sounds until you return the vehicle speed within the speed limit.

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

## Temporarily pausing or Resuming MSLA

Press the II a switch to temporarily pause the set speed limit.

• The set speed limit turns off but the Speed Limit & LIMIT indicator stays on.

To resume MSLA after the function was paused, operate the +, -, || > switch.

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



#### WARNING

MSLA does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and be aware of unexpected and sudden situations. Pay attention to the road conditions at all times.



# **CAUTION**

- Always set the vehicle speed to the speed limit in your state.
- Keep MSLA off when the function is not in use, to avoid inadvertently setting a speed. Check that the Speed Limit & LIMIT indicator is off.

### **MSLA Settings**

### Warning methods

You can set the following Warning methods for MSLA:

· Warning volume

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

# **Intelligent Speed Limit Assist (ISLA)**

### # If Equipped

ISLA uses information from the detected road sign and navigation system to inform you of the speed limit and additional information, and help maintain within the speed limit on the road.



### CAUTION

- · ISLA may not operate properly if used in other states.
- ISLA may not operate properly if the navigation system is not updated regularly. For more information, scan the QR code in a separately supplied simple manual.

### **ISLA Operation**

# Displaying speed limit



Speed limit information appears on the instrument cluster.

- If speed limit information of the road cannot be recognized, '---' sign appears. Please refer to the 'ISLA limitations' section, if the road signs are difficult to recognize.
- ISLA provides additional road sign information in addition to speed limit. The additional road sign information provided may differ according to your country.

#### Warning overspeed

When driving at a speed higher than the appearing speed limit, the red speed limit indicator appears.

### Changing set speed



2C\_ISLAChangeSetSpeedInfo

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

### Set Speed Auto Change (Navigation equipped)



2C\_ISLASetSpeedAutoChangeInfo

If the driver sets the set speed to the speed limit on the road, when MSLA or SCC is activated, the set speed is automatically adjusted accordingly when the speed limit is changed. The function operates on the road which has a speed limit of 45 mph (70 km/h) or higher. When the function is active, the cruising speed on the instrument cluster appears in green.

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



#### WARNING

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

### **ISLA Settings**



2C\_SpeedLimitSettings

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

- Speed Limit Offset: Speed Limit Offset can be adjusted. Speed Limit Warning and Speed Limit Assist warns the driver or adjusts the driving speed when the vehicle speed exceeds the speed at which the set Speed Limit Offset is added to speed limit.
- Speed Limit Assist: ISLA informs the driver of speed limit and additional road signs, and warn the driver if the vehicle speed is faster than the speed limit. In addition, ISLA informs the driver to change set speed of MSLA and/or SCC to help the driver stay within the speed limit.
- Speed Limit Warning: ISLA informs the driver of speed limit. In addition, ISLA warns the driver when the vehicle is driven faster than the speed limit.
- Off: ISLA turns off. The warning light turns off.



### WARNING

- When the vehicle is restarted, ISLA always turns on.
- ISLA does not substitute for proper and safe driving. It is the responsibility of the driver to always drive safely and be aware of unexpected and sudden situations. Pay attention to the road conditions at all times.

#### INFORMATION

- Speed Limit Assist operates based on the Speed Limit Offset setting added to the speed limit. If you want to change the adjusted speed according to the speed limit, adjust the offset to 0.
- The setting of the Speed Limit Offset is not reflected in Navigation-based Smart Cruise Control (NSCC).
- ISLA warning and control are described based on the Offset adjust to 0.

### **ISLA Malfunction and Limitations**

#### ISLA malfunction

When ISLA or related component malfunctions, a warning message, the Master /\ and speed limit \( \square\) warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system

operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

### Detecting sensors

ISLA uses the following sensor:

· Front view camera

For more information, refer to the 'Sensor Information' and 'FCA Malfunction and Limitations' section in this chapter.

#### ISLA limitations

ISLA may not operate properly, or it may operate unexpectedly under the following circumstances:

- · The road sign is contaminated or indistinguishable
  - The road sign is difficult to see due to bad weather, such as rain, snow, fog, etc.
  - The road sign is partially obscured by surrounding objects or shadow
- · The road signs do not conform to the standard
  - The text or illustration on the road sign is different from the standard
  - The road sign is installed between the main line and the exit road or between diverging roads
  - A sign is attached to another vehicle
- The distance between the vehicle and the road signs is too far
- The vehicle encounters illuminant road signs
- ISLA incorrectly recognizes numbers or illustrations in the street signs or other signs as the speed limit
- · A road sign near the road you are driving is detected
- Multiple signs are installed close together
- The other traffic sign or signboards are alongside the road sign
- The minimum speed limit sign is misrecognized as a maximum speed limit sign
- The brightness changes suddenly, for example when entering or exiting a tunnel or passing under a bridge
- Headlights are not used or the brightness of the headlights are weak at night or in the tunnel
- Road signs are difficult to recognize due to the reflection of sunlight, street lights, or oncoming vehicles
- The field of view of the front view camera is obstructed by sun glare
- Driving on a road that is sharply curved or continuously curved
- · Driving through speed bumps, or driving up and down or left to right on steep inclines
- · The vehicle is shaking heavily
- The navigation information or GPS information contain errors.
- The driver does not follow the guide of the navigation.

- The driver is driving on a new road that is not in the navigation system yet.
- · Driving on a road under construction.
- The navigation software is being updated while driving
- · The navigation is restarted while driving



# MARNING .

- ISLA is a supplemental function that helps the driver to comply with the speed limit on the road, and the correct speed limit may not appear or control the driving speed properly.
- Set your vehicle speed to the speed limit for the road and use the appropriate unit (mph or km/h) for your states.
- ISLA may not operate for about 15 seconds after the vehicle is started or the front camera is initialized.

# **Driver Attention Warning (DAW)**

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

### **DAW Operation**

### Consider taking a break

The 'Consider taking a break' message appears and the Inattentive Driving "warning light blinks on the cluster with a warning sound to suggest that the driver take a break, when the driver's attention level is below a certain level.

 DAW does not suggest a break when the total driving time is shorter than 4 minutes or 4 minutes has not passed after the last break was suggested.



### CAUTION

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

### Leading vehicle departure alert function

When a detected vehicle in front departs from a stop, Leading Vehicle Departure Alert informs the driver with a 'Leading vehicle is driving away' message on the cluster and a warning sound.



### WARNING

If any other system's warning message appears or audible warning such as the seat belt warning chime is already generated. Leading Vehicle Departure Alert's warning message may not appear and audible warning may not be generated.



# CAUTION

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

#### **DAW Settings**



2C LeadingVehicleDepartureSettings

With the vehicle on, select Setup > Vehicle > Driver Assistance > Driver Attention Warning and then enable Leading Vehicle Departure Alert in the infotainment system to use the function.

- Leading Vehicle Departure Alert: The function informs the driver when a detected vehicle in front departs from a stop.
- · Inattentive Driving Warning: DAW can be turned on or off.



#### WARNING

If you deselect to turn off the function, DAW cannot assist you. The driver should always be aware of the surroundings and drive safely

#### NOTICE

The Inattentive Driving Warning setting may not exist in regions where DAW is always on.

# Warning methods

You can set the following Warning methods for DAW:

- · Warning volume
- Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

#### **DAW Malfunction and Limitations**

#### DAW malfunction

When DAW or related component malfunctions, a warning message, the Master A warning light, and the Inattentive Driving "warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

### Detecting sensors

DAW uses the following sensor:

· Front view camera

For more information, refer to the 'Driver Assistance System Settings' and 'FCA Malfunction and Limitations' section in this chapter.

#### DAW limitations

DAW may not work properly in the following situations:

- The camera is damaged, obstructed by foreign material, or its detection performance is reduced due to the surroundings.
- · The vehicle is driven violently
- · The vehicle intentionally crosses over lanes frequently
- The vehicle is controlled by driver assistance system, such as Lane Keeping Assist (LKA)
- · Lanes are blurred or erased

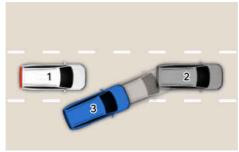
Leading Vehicle Departure Alert may not work properly in the following situations:

• When a vehicle cuts in front of your vehicle



2C DAWVCutIn

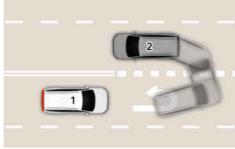
• When the vehicle 3 cuts in between your vehicle and the vehicle 2 ahead



2C DAWCutIn 2

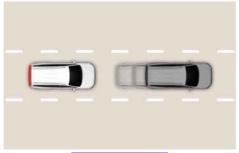
- 1. Your vehicle
- 2. Front vehicle
- 3. Intervening vehicles

• When the vehicle ahead sharply steers (such as to turn left or right or make a U- turn,



2C\_DAWSharplySteer

- 1. Your vehicle
- 2. Front vehicle
- When the vehicle ahead abruptly departures



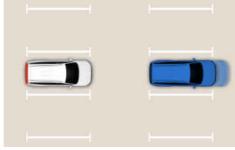
2C\_DAWAbruptlyDeparture

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



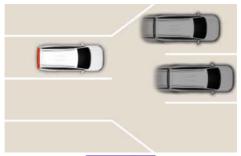
2C DAWBetweenVehicles

• When the vehicle detects a parked vehicle in front drive away in a parking lot



2C\_DAWInParkingLot

• When your vehicle stops at a lane that divide or merge and it is difficult to identify the vehicle ahead



2C\_DAWInTollbooth



# **MARNING**

DAW may not operate for about 15 seconds after the vehicle is started or the front view camera is initialized.

# Forward Attention Warning (FAW)

## f Equipped

FAW uses the in-cabin camera to help prevent the driver from being distracted while driving with an audible warning and warning light.

### **FAW Operation**

## Operating conditions

FAW will operate when the following conditions are satisfied:

- Vehicle speed is above 0.6 mph (1 km/h).
- The gear is in D (Drive) or N (Neutral).

#### FAW

FAW determines whether the driver is focused on the road depending on information, such as the amount of time the driver is looking elsewhere, the amount of time the eyes are closed, how frequently the driver yawns, etc. If FAW judges the driver is not focused, the 'Keep eyes on the road and drive carefully' warning message will appear on the cluster, and an audible warning will sound.



### WARNING

If any other system's warning message appears or audible warning is generated, FAW's warning message may not appear and an audible warning may not be generated.



# CAUTION

- FAW may warn the driver even though the driver is focused on the road because of driving style and driving pattern.
- FAW is a supplemental function and may not determine whether the driver is distracted while driving.
- The driver is responsible for safe driving and must focus on the road.

#### NOTICE

FAW does not transmit recorded videos outside of the vehicle or store the video.

## **FAW Settings**



2C\_ForwardAttentionWarningSettings

With the vehicle on, select **Setup > Vehicle > Driver Assistance > Driver Attention Warning > Forward Attention Warning** in the infotainment system to set whether to use the function.

If **Forward Attention Warning** is enabled, the function warns the driver when the driver's gaze is not focused on the road.

- When the vehicle is restarted, Forward Attention Warning always turns on.
- The Warning method for FAW can not be changed.
- Even if FAW is turned off, the in-cabin camera still operates to detect the driver's forward attention under the condition Emergency Stop can operate (i.e., if Smart Cruise Control and Lane Following Assist are turned on).

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When the vehicle is restarted, FAW maintains the last setting.

### **FAW Malfunction and Limitations**

### FAW malfunction

When FAW or related component malfunctions, a warning message and the Forward Attention warning light appears on the instrument cluster. When there is an object right in front of the in-cabin camera or between the driver and the camera for a certain period of time FAW does not operate properly. If the object is removed or the camera is able to detect the driver's face, the function operates normally. If FAW does not operate properly after the object is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

## Detecting sensors

FAW uses the following sensor:

· In-cabin camera

For more information, refer to the 'Sensor Information' section in this chapter.



#### WARNING

Do not look toward the camera within 8 in. (20 cm) for longer than a minute.

#### NOTICE

Two red lights may appear on the camera in the following conditions when:

- · The outside brightness is dim or driving at night
- The vehicle drives inside a building, such as a basement parking lot, garage or tunnel
- The camera case is partially broken

#### FAW limitations

FAW may not operate properly, or it may operate unexpectedly under the following circumstances:

#### 721 Driver Assistance System

- The driver is wearing sunglasses, special glasses, infrared cutoff glasses, refracting glasses or thick glasses
- The driver has heavy eye makeup (eyeliner, mascara, color makeup, false eyelash) or eye piercing
- The driver's view is blocked by his/her hair, hat, etc.
- The driver is winking or wearing an eye patch on one eye
- The driver's face is covered partially by a mask, muffler, etc.
- The driver's view is blocked by incoming light from outside of the vehicle
- Light from outside, sunlight or infrared LED light of the camera is reflected by glasses or sunglasses
- The driver turns or lowers his/her head so that the face or an eye is hidden from the camera
- The driver shakes his/her head up and down, or adverse road conditions cause excessive vehicle vibrations while driving
- The driver is improperly positioned in the driver's seat so that the driver's face is not detected
- · The driver is too tall or short
- The camera is blocked by the driver's grip on the steering wheel
- · More than two people are looking at the instrument cluster simultaneously from the driver's seat
- The driver's eyes are narrowed due to laughing or sun glare
- Misrecognize a picture or mannequin that has a similar size of the driver's face
- There are other devices using infrared light in the vehicle

# **Blind-Spot View Monitor (BVM)**

## # If Equipped

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

## **BVM Operation**





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

BVM is canceled when one of the following conditions is met:

- · The turn signal turns off
- · The hazard warning flasher is on
- Other important warning appears on the instrument cluster

### **BVM Settings**



2C\_ForwardSafetySettings

With the vehicle on, select Setup > Vehicle > Driver Assistance > Driving Safety and then enable **BVM** in the infotainment system to turn on the BVM feature.

#### **BVM Malfunction**

When BVM is not working properly, or the cluster display flickers, or the camera image does not appear properly, have your vehicle inspected by an authorized HYUNDAI dealer.



### WARNING

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

## Detecting sensors

BVM uses the following sensor:

· Wide-side view camera

For more information, refer to the 'Sensor Information' section in this chapter.

# **Smart Cruise Control (SCC)**

SCC helps maintain the set speed and distance with the detected vehicle ahead.

#### INFORMATION

Emergency Stop may operate while the SCC is in operation. For more information, refer to the 'Emergency Stop (ES)' section in this chapter.

## **SCC Operation**

## Operating conditions



You can see the status of the SCC operation in the Driving Assist view on the cluster. For more information, refer to the 'Cluster Settings' section in chapter 4.

SCC operates when the following conditions are satisfied.

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

SCC does not operate in the following conditions.

- Your vehicle is in power down mode ( indicator on)
- The driver's door is opened
- Parking Brake is applied
- Electronic Parking Brake (EPB) is applied
- ESC or ABS is controlling the vehicle
- · Forward Collision-Avoidance Assist (FCA) brake control is operating
- Remote Smart Parking Assist (RSPA) brake control is operating (if equipped)

When stopped behind another vehicle, the driver should depress the brake pedal to turn on SCC.

## Turning SCC on/off



Press the Driving Assist 👝 button to turn on or off SCC.

- When SCC is on, the current speed on the cluster is set as the set speed.
- If there is no vehicle in front of you, the set speed is maintained, but if there is a vehicle
  in front of you, the speed may change to maintain the distance to the vehicle ahead.
  If the vehicle ahead accelerates, your vehicle travels at a steady cruising speed after
  accelerating to the set speed.

### **Operating status**



- 1. Whether there is a vehicle ahead and the selected distance level
- 2. Set speed

The status of the SCC operation appears at the top area of the cluster display.

#### When temporarily canceled

Your vehicle, set speed appears in gray.

When there is a vehicle ahead, it appears in gray.

#### **Precautions**

- When you press and hold the Driving Assist button to turn off SCC, MSLA turns on.
  To turn SCC back on, press the Driving Assist button to turn off MSLA, then press
  the Driving Assist button once more.
- If your vehicle speed is between 0-20 mph (0-30 km/h) when you press the Driving Assist button, SCC speed is set to 20 mph (30 km/h).
- The distance from the front vehicle on the instrument cluster appears according to the actual distance between your vehicle and the vehicle ahead.
- The target distance may differ depending on the vehicle speed and the set distance level. If the vehicle speed is low, even though the vehicle distance have changed, the change of the target vehicle distance may be small.

- SCC may not temporarily operate while the vehicle is turning on or detecting sensors are initializing (such as rebooting, etc.).
- · You may hear sounds when SCC is braking your vehicle. This is normal and does not indicate a malfunction.
- You can also see the status of the SCC operation in the Driving Assist view on the instrument cluster. For more information, refer to the 'Cluster Settings' section in chapter 4.

## Increasing or decreasing set speed

Push the +/- switch up or down and release it immediately. The set speed increases or decreases by 1 mph (1 km/h) each time the switch is operated in this manner.

- To quickly change the set speed, push and hold the + switch up or switch down. The set speed changes to a multiple of 5 mph (10 km/h).
- You can increase the set speed up to 110 mph (180 km/h) or decrease the set speed to 20 mph (30 km/h).
- The driving speed may not reach the set speed depending on the vehicle characteristics and driving conditions.



## MARNING

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

## Setting vehicle distance

To change the vehicle distance, press the \$\bigsep\$ button repeatedly.



2C SCCDistanceStage

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

• Distance 4: about 172 ft. (52.5 m) > Distance 3: about 130 ft. (40 m) > Distance 2: about 106 ft. (32.5 m) > Distance 1: about 82 ft. (25 m)



### և WARNING

Do not use the switches and buttons at the same time, SCC may not operate properly.

## Temporarily canceling and resuming SCC



Press the II a switch or depress the brake pedal to temporarily cancel SCC.

To resume SCC after the function was canceled, operate the +, - or II'D switch.

 If you push the + switch up or - switch down, vehicle speed is be set to the current speed on the cluster. If you press the || > switch, vehicle speed resumes to the preset speed.



### WARNING

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

## Temporarily canceling SCC

If SCC is temporarily canceled automatically, the 'Smart Cruise Control deactivated' warning message appears on the cluster, and an audible warning sounds to warn the driver.

SCC is temporarily canceled automatically when:

- The vehicle speed is above 120 mph (180 km/h)
- The vehicle is stopped for a certain period of time
- The accelerator pedal is continuously depressed for a certain period of time
- The conditions for the SCC to operate is not satisfied

If SCC is temporarily canceled while the vehicle is at a standstill with the function activated, EPB may be applied.



### MARNING

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

# Accelerating temporarily

If you want to speed up temporarily without altering the set speed while SCC is operating, depress the accelerator pedal. While the accelerator pedal is depressed, the set speed, distance level and target distance blinks on the instrument cluster. However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.



## WARNING

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

## Overtaking Acceleration Assist

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

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

Overtaking Acceleration Assist does not operate in the following conditions.

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



### WARNING

Be careful when your vehicle temporarily accelerates to overtake a vehicle in front. Pay attention to the road conditions at all times.

## Based on Driving Style

SCC operates based on the driver's driving style, such as vehicle distance, acceleration, reaction speed.

When Based on Driving Style is operating, the vehicle distance level and target distance appears white based on the driving style.



### WARNING

Changes in the driver's driving style may change the previously reflected vehicle distance, acceleration intensity, and response speed. Always pay attention.



## CAUTION

- The vehicle must be driven sufficiently to reflect the actual driving style of the driver, such as inter-vehicle distance, acceleration and reaction speed.
- Based on Driving Style may not reflect the driver's driving style or driving conditions that affects driving safety.
- If you are driving in special conditions, such as snow, rain, fog or steep slopes, the vehicle may not be driven according to the driver's driving style.
- Based on Driving Style may not reflect the driver's driving style other than the intervehicle distance, acceleration intensity, and reaction speed.

# Warnings of SCC

SCC conditions not satisfied

If the Driving Assist button, + switch, - switch or II > switch is operated when SCC operating conditions are not satisfied, the 'Smart Cruise Ctrl. conditions not met' appears on the cluster, and an audible warning sounds.

### Restarting after stopping

In traffic, your vehicle stops if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving within a certain period, your vehicle starts as well.

 If your vehicle is equipped with Emergency Stop and an in-cabin camera for Forward Attention Warning, the vehicle's dwell time may be extended depending on whether the driver is keeping eyes forward.

In addition, after the vehicle has stopped and a certain time has passed, the 'Use switch or pedal to accelerate' message appears on the instrument cluster. Depress the accelerator pedal or operate the + switch, - switch or || > switch to start driving. Always pay attention to the situation ahead when restarting.

### Warning road conditions ahead

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

• The vehicle in front disappears when SCC is maintaining the distance with the vehicle ahead while driving below a certain speed.



### WARNING

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

#### **Collision warning**

While SCC is operating, when the collision risk with the vehicle ahead is high, FCA operates to warn the driver. Always have your eyes on the road while driving, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance. For more information, refer to the 'Forward Collision-Avoidance Assist (FCA)' section in this chapter.



#### WARNING

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

### **SCC Settings**



2C SCCBasedOnStyle

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

- When Based on Driving Style is activated, SCC adjusts the vehicle distance, acceleration, reaction speed according to the driver's driving style. Driving style can also be set manually (if equipped).
- If the Based on Driving Style is supported, you can select it from the Vehicle > Driver Assistance > Driving Convenience > Smart Cruise Control.
- Based on Driving Style setting continuously learns when the driver drives the vehicle.
- · When Based on Driving Style is deactivated, the driver's driving style such as vehicle distance, acceleration, reaction speed maintains the same stage.
- Even if the steps of the driver's driving style such as vehicle distance, acceleration, reaction speed appearing when the Base on Driving Style is activated or deactivated are the same, the driving style to be controlled may be differently.

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

#### **Precautions**

- SCC may not operate for few seconds after the vehicle is started or the front view camera or front radar is initialized
- You may hear a sound when the brake is controlled by SCC.
- Based on Driving Style may not reflect the driver's driving style or driving conditions that affects driving safety.

### **SCC Malfunction and Limitations**

### SCC malfunction

When SCC or related component malfunctions, a warning message, the Master A warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

## Detecting sensors

SCC uses the following sensors:

- · Front view camera
- · Front radar
- · Front corner radar

For more information, refer to the 'Sensor Information' and 'Forward Collision-Avoidance Assist (FCA)' section in this chapter.

### SCC limitations

SCC may not operate properly, or it may operate unexpectedly under the following circumstances:

- · The vehicle in front is detected late
- The vehicle in front is suddenly blocked by a obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed
- The vehicle in front is bent out of shape
- · The front vehicle's speed is fast or slow
- With a vehicle in front, your vehicle changes lane at low speed
- · The vehicle in front is covered with snow
- · Unstable driving
- · You are on a round about and the vehicle in front is not detected
- You are continuously driving in a circle
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- · When driving under following circumstances:
  - Driving on a slippery surface due to snow, water puddle, ice, etc.
  - Driving on a curved road
  - Driving through steam, smoke or shadow
  - Driving through a tunnel or iron bridge
  - Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
  - Driving near a highway interchange or tollbooth

- Driving in a parking lot
- Driving through a construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- Driving on an incline road, curved road, etc.
- Driving through a roadside with trees or streetlights
- Driving through a narrow road where trees or grass are overgrown
- There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise

### · Driving on a curved road



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

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

Your vehicle speed can be reduced due to a vehicle in the adjacent lane. Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the SCC.

## · Driving on an inclined road



During uphill or downhill driving, the SCC may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, vehicle speed rapidly decreases when the vehicle ahead is detected suddenly. Select the appropriate set

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

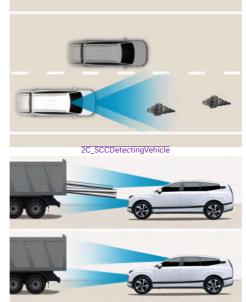
## · Changing lanes



- 1. Your vehicle
- 2. Lane changing vehicle

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

### · Situations when detecting are limited



2C\_CameraRadarDetectingVehicle

In the following cases, some vehicle, pedestrian, or animal in your lane cannot be detected by the sensor. Always check the traffic conditions around the vehicle. If necessary, control your speed.

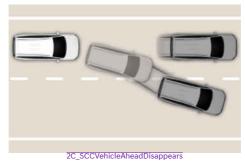
- Vehicle that is offset to one side
- Slow-moving vehicle or sudden decelerating vehicle
- Vehicle with higher ground clearance or vehicle carrying loads that stick out of the back of the vehicle
- Vehicle that has the front lifted due to heavy loads
- Oncoming vehicle
- Vehicle within about 6 ft. (2 m) from your vehicle
- Stopped vehicle
- Vehicle with small rear profile, such as a trailer
- Narrow vehicle, such as a motorcycle or bicycle
- Special vehicle
- Animal or pedestrian

Adjust your vehicle speed by depressing the brake pedal according to the road and driving conditions ahead. In the following cases, the vehicle in front cannot be detected by the sensor:

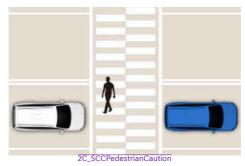
- You are steering your vehicle
- Driving on narrow or sharply curved roads
- When a vehicle ahead disappears at an intersection, your vehicle may accelerate.
   Always pay attention to road and driving conditions while driving.



• When a vehicle in front of you merges out of the lane, SCC may not immediately detect the new vehicle that is now in front of you. Always pay attention to road and driving conditions while driving.



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



# **Emergency Stop (ES)**

If ES judges the driver is unresponsive, the function helps stop your vehicle within the driving lane by centering the vehicle in the lane and assisting in braking.

## **ES** Operation

## Operating conditions

ES is ready to operate when both Smart Cruise Control and Lane Following Assist operate.

- ES is also ready to operate when both Navigation-based Smart Cruise Control and Lane Following Assist operate simultaneously, or Highway Driving Assist operates. For more information about Smart Cruise Control, Navigation-based Smart Cruise Control, Lane Following Assist, and Highway Driving Assist, refer to the 'Smart Cruise Control (SCC)', 'Navigation-based Smart Cruise Control (NSCC)', 'Lane Following Assist (LFA)', and 'Highway Driving Assist (HDA)' sections in this chapter.
- Once ES is ready to operate, the driver's focus on the road will be monitored continuously even if Forward Attention Warning is turned off. For more information, refer to the 'Forward Attention Warning (FAW)' section in this chapter.
- · Lane Following Assist cannot be turned on if the in-cabin camera is malfunctioning.

## Emergency Stop forewarning and braking control

ES determines that the driver is unresponsive if the hands-off warning or the driver's distraction detected by the in-cabin camera (if equipped) is continued. When the driver is determined to be unresponsive, a warning message appears on the instrument cluster, an audible warning sounds, and the steering wheel vibrates as a forewarning.



2C\_ESBasicInfo

If the driver is still unresponsive despite the prior warning, ES controls the steering wheel and brake pedal to stop the vehicle within the driving lane. It is also notified to the driver that ES is operating with a warning message, a warning sound, and vibration on the steering wheel.

 While ES is operating, the vehicle distance setting of Smart Cruise Control is changed to Distance 4. The vehicle distance setting is set to the last distance setting after Emergency Stop is deactivated.



The forewarning and ES are deactivated if one of the following conditions is met:

- The driver's gaze is detected to be focused on the road ahead by in-cabin camera (if equipped) and the driver controls the steering wheel.
- Smart Cruise Control is temporarily disabled or turned off.
- · Lane Following Assist is turned off.

### After stopping

After the vehicle is stopped by ES, a warning message appears on the instrument cluster, an audible warning sounds, and the hazard warning flasher blinks. After your vehicle has stopped, the following is performed:

- · Doors are unlocked.
- SOS call is made (if equipped).
- Electronic Parking Brake (EPB) is applied.

## Deactivating ES

If the function judges you have responded, ES is deactivated when one of the following condition is met:

- The driver focuses on the road ahead (if in-cabin camera equipped) and controls the steering wheel.
- The driver strongly and continuously depresses the accelerator pedal.
- The driver strongly depresses the brake pedal.
- The driver presses the Lane Driving Assist button (/⊕\).
- The driver presses the Driving Assist button (ﷺ).
- The driver presses the hazard warning flasher button after the vehicle has stopped.
- The front door is opened.

The vehicle needs to be restarted to reactivate Lane Following Assist or Highway Driving Assist after the vehicle is stopped and ES is deactivated.



#### CAUTION

SCC operation is limited if the in-cabin camera is unable to detect your face. (if equipped)

### **ES Malfunction and Limitations**

### ES malfunction

When ES is not working properly, the 'Check Emergency Stopping function.' warning message appears, and the Master ⚠ warning light illuminates on the instrument cluster. If this occurs, have your vehicle inspected by an authorized HYUNDAI dealer.

### Detecting sensors

ES uses the following sensors:

- · Front view camera
- Front radar

For more information, refer to the 'Sensor Information' section in this chapter.

### Limitations of ES

For more information, refer to the 'Smart Cruise Control (SCC)' and 'Lane Following Assist (LFA)' sections in this chapter.

# **Navigation-Based Smart Cruise Control (NSCC)**

NSCC can help drive at a safe speed according to the road conditions when driving on highways by using road information from the navigation system while Smart Cruise Control (SCC) is operating.

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

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

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

## **NSCC Operation**

### Operating conditions

NSCC is ready to operate if all of the following conditions are satisfied:

- Highway Auto Speed Change is selected from the infotainment system
- SCC is operating
- · Driving on main roads of highways

## NSCC display and control

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



2C NSCCStandbyInfo

- · Green: If the operating conditions are satisfied
- · Blinking Green: While the speed is being controlled
- Gray: If NSCC cannot control the vehicle, such as when SCC is temporarily canceled or the navigation system is searching for a route
- Blinking White: When the driver depresses the accelerator pedal

## Highway Curve Zone Auto Slowdown

Depending on the curve ahead on the highway, your vehicle decelerates, and after passing the curve, your vehicle accelerates to SCC's set speed.

• Vehicle deceleration time may differ depending on the vehicle speed and the degree of the curve on the road. The higher the driving speed, deceleration starts faster.

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## **NSCC Settings**

### Highway Set Speed Auto Change



2C NSCCSetInfo

With the vehicle on, select Setup > Vehicle > Driver Assistance > Driving Convenience > Highway Auto Speed Change from the Settings menu to turn on NSCC or deselect to turn off the function.

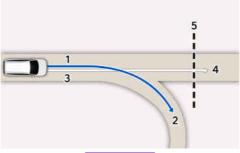
When there is a problem with NSCC, the function cannot be set in the infotainment system.

#### **NSCC limitations**

NSCC may not operate properly under the following circumstances:

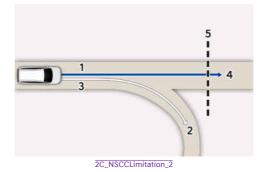
- The navigation is not working properly
- Map information is not transmitted due to infotainment system's abnormal operation
- The map information and the actual road is different because of real-time GPS data or map information error
- · The navigation searches for a route while driving
- GPS signals are blocked in areas such as a tunnel
- The vehicle enters a service station or rest area.
- Android Auto or Car Play is operating in the infotainment system
- · The navigation cannot detect the current vehicle position (for example, elevated roads including overpass adjacent to general roads or nearby roads exist in a parallel way)
- The navigation is being updated while driving
- The navigation is being restarted while driving
- The speed limit of some sections changes according to the road situations
- Driving on a road under construction
- Driving in lane-restricted driving situations
- There is bad weather, such as heavy rain, heavy snow, etc.
- The vehicle leaves the main road to enter an interchange, junction, rest area, etc.
- You go off the route set in the navigation system
- A road that divides into two or more roads and joins again
- When lanes appear or disappear at sections other than the road that divides into two or mode roads.

- · When the performance of sensors that detect objects around the vehicle is at limit
- If the lane marking (or road edge) is unusual or damaged



2C NSCCLimitation

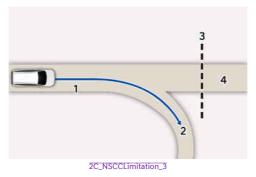
- 1. Set route
- 2. Branch line
- 3. Driving route
- 4. Main road
- 5. Curved road section
- When there is a difference between the navigation set route (branch line) and the driving route (main road), Highway Curve Zone Auto Slowdown function may not operate until the driving route is recognized as the main road.
- When the vehicle's driving route is recognized as the main road by maintaining the main road instead of the navigation set route, Highway Curve Zone Auto Slowdown function operates. Depending on the distance to the curve and the current vehicle speed, vehicle deceleration may not be sufficient or may decelerate rapidly.



- 1. Set route
- 2. Branch line
- 3. Driving route
- 4. Main road
- 5. Curved road section
- When there is a difference between the navigation route (main road) and the driving route (branch line), Highway Curve Zone Auto Slowdown function may temporarily operate based on the curve information on the main road.

### 743 Driver Assistance System

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



- 1. Driving route
- 2. Branch line
- 3. Curved road section
- 4. Main road
- If there is no destination set on the navigation, Highway Curve Zone Auto Slowdown
  function operates based on the curve information on the main road. Even if you depart
  from the main road, Highway Curve Zone Auto Slowdown function may temporarily
  operate due to navigation information of the highway curve section.



- NSCC is not a substitute for safe driving practices, but a convenience function. Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws.
- The navigation's speed limit information may differ from the actual speed limit information on the road. It is the driver's responsibility to check the speed limit on the actual driving road or lane.
- NSCC automatically cancels when you leave the highway main road. Always pay attention to road and driving conditions while driving.
- NSCC may not operate due to the existence of leading vehicles and the driving conditions of the vehicle. Always pay attention to road and driving conditions while driving.
- When you are towing a trailer or another vehicle, turn off NSCC for safety reasons. You may lose control stability.
- · After you pass through a tollbooth on a highway NSCC operates based on the first lane. If you enter one of the other lanes, NSCC might not operate properly.
- The vehicle accelerates if the driver depresses the accelerator pedal while NSCC is operating, and the function does not decelerate the vehicle. However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.
- If the driver accelerates and releases the accelerator pedal while NSCC is operating, the vehicle may not decelerate sufficiently or may rapidly decelerate to a safe speed.
- If the curve is too large or too small, NSCC may not operate.

#### Precautions

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

# Lane Following Assist (LFA)

LFA helps detect lane markings and/or a vehicle ahead on the road, and provide steering assist to help keep your vehicle in the center of the lane.

## **Turning LFA On/Off**



2C\_LaneSafetyButton

With the vehicle on, shortly press the Lane Driving Assist  $/\oplus \setminus$  button located on the steering wheel to turn on LFA. Press the button again to turn off the function.

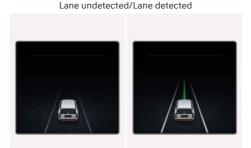
## **LFA Operation**



2C LFALaneDetectInfo

You can see the status of the LFA operation in the Driving Assist view on the instrument cluster. For more information, refer to the 'Cluster Settings' section in chapter 4.

• When both lane markings are detected, the lane lines on the instrument cluster changes from gray to white.



2C LaneDetectionInfo

## Lane Following Assist

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



### MARNING

LFA does not operate when the turn signal light or the hazard warning flasher is on.



#### CAUTION

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

#### **Precautions**

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

## Hands-off warning

If the driver does not keep their hands on the steering wheel for several seconds, the warning message appears and a warning sounds in stages.

- First stage: 'Keep hands on steering wheel' warning message appears
- Second stage: Warning message (red steering wheel) appears with a warning sound

## Cancelina LFA

If the driver still does not have their hands on the steering wheel after the hands-off warning, the 'Lane Following Assist deactivated' warning message appears and LFA is automatically canceled.



## WARNING

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

## **LFA Settings**



### CAUTION

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

## Warning methods

You can set the following Warning methods for LFA:

- · Warning volume
- Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

### **LFA Malfunction and Limitations**

#### LFA malfunction

When LFA or related component malfunctions, a warning message, the Master A warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

## Detecting sensors

LFA uses the following sensor:

· Front view camera

For more information, refer to the 'Sensor Information' section in this chapter.

### LFA limitations

When the detecting sensors cannot detect the surroundings, LFA may not operate properly.

For more information, refer to the 'Lane Keeping Assist (LKA)' section in this chapter.



### MARNING

- For more information on LFA precautions, refer to the 'LKA Malfunction and Limitations' section in this chapter.
- · Loading in excess of the maximum load allowance or concentrated loading at one point in the cargo compartment can reduce the vehicle's driving stability, which can in turn reduce the effectiveness of LFA.

# **Highway Driving Assist (HDA)**

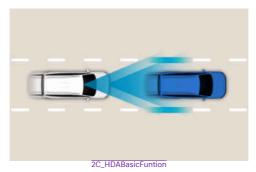
HDA helps maintain a set distance and speed from the vehicle ahead while driving on a highway main section and helps center the vehicle in the lane.

## **HDA Operation**



HDA operates on main roads of highway, and does not operate on interchanges or junctions.

### Basic function



HDA function helps maintain the set speed and distance from the vehicle ahead, and helps center your vehicle in the lane.

# Turning HDA on/off

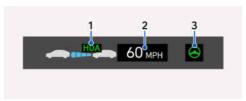


2C\_DrivingAssistButton

HDA operates when driving on the main road of highways, and turning on/off HDA by pressing the Driving Assist 🙉 button.

· HDA operates automatically when entering the main road of highways while Lane Following Assist (LFA) and Smart Cruise Control (SCC) are operating.

## HDA operating status



2C HDAActiveIndicatorInfo 2

The indicators appear on the cluster display as below depending on the status of HDA.

No.	Description
	Highway Driving Assist HDA indicator
	Green: The indicator appears in green when HDA is on and the vehicle distance, speed and, centering control is activated.
1	• Gray: HDA is in standby state when the driver presses the II' switch or depresses the brake pedal to temporarily cancel SCC. At this time, LFA operates properly.
	Blinking White: The indicator blinks in white when the driver temporarily accelerates by depressing the accelerator.
	Not appearing: When HDA turns off, the indicator also turns off.
2	SCC set speed
3	LFA operating status

- · For more information on LFA limitations, refer to the 'Lane Following Assist (LFA)' in this chapter.
- · For more information on SCC limitations, refer to the 'Smart Cruise Control (SCC)' in this chapter.
- You can see the status of the HDA operation in the Driving Assist view on the instrument cluster. For more information, refer to the 'Cluster Settings' section in chapter 4.

### Restarting after stopping

When HDA is operating, your vehicle stops if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving within 30 seconds after the stop, your vehicle starts as well.

In addition, after the vehicle has stopped and 30 seconds have passed, the 'Use switch or pedal to accelerate' message appears on the instrument cluster. Depress the accelerator pedal or operate the + switch, - switch or || ) switch to start driving.

#### Warning and control when hands-off detected

### Hands-off warning

If the driver takes their hands off the steering wheel for several seconds, the 'Keep hands on steering wheel' warning message appears and an audible warning sounds.

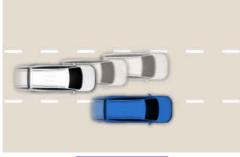


### CAUTION

If you keep taking your hands off the steering wheel, then the Emergency Stop will activate.

For more information, refer to the 'Emergency Stop (ES)' section in this chapter.

## Driving to one side within lane

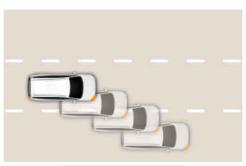


2C\_HDADrivingToOneSide

When your vehicle speed is above 40 mph (60 km/h), if a vehicle around you is driving at a close distance, your vehicle controls steering in the opposite direction of the vehicle to assist in safe driving. If there a detected vehicle in both sides of the lane that are driving close to you, the function does not veer to the opposite side of the lane.

## Highway Lane Change Assist





2C HDALaneChangeAssistFuntion

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

• HDA is available only on controlled access roads.

 Controlled access roads are roads with limited entrances and exits that allow uninterrupted high speed traffic flow.

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

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

**Turning on Highway Lane Change Assist** 

Highway Lane Change Assist turns on under the following circumstances:

• Operate the +, -, □ switch to turn on HDA. Highway Lane Change Assist also turns on.

### **Operating status**

You can see the status of the Highway Lane Change Assist operation in the Driving Assist view on the cluster.



2C\_HighwayLaneChangeAssistIndicator

Highway Lane Change Assist  $\forall$  indicator appears depending on the status of the function.

When the function is not operating or cancels during operation, a warning message appears on the cluster display.

You can see the status of the Highway Lane Change Assist operation in the Driving Assist view on the instrument cluster. Operating status is shown with indicator colors, arrows, etc.

**Highway Lane Change Assist ready to operate** 

When all the following conditions are satisfied, Highway Lane Change Assist function is ready to operate, and the  $\checkmark$  indicator turns green:

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

Hazard warning flasher is off

While Highway Lane Change Assist function is turned on (indicator on), LFA does not cancel even if the turn signal indicator or hazard warning flasher is operating.

## **Highway Lane Change Assist operation**



2C\_HDALaneChangeSwitchOperation

Highway Lane Change Assist operates and the + → indicator blinks in green when you push the turn signal lever up or down slightly or completely and all of the following conditions are satisfied.

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

Highway Lane Change Assist cancels when the driver performs the following actions. When Highway Lane Change Assist is canceled, the indicator blinks in white for a moment.

- The turn signal lever is pushed completely and it's released to the center before the vehicle steps a lane line while Highway Lane Line Assist is operating.
- The turn signal lever is turned on in the opposite direction of lane change
- The steering wheel is steered sharply



## MARNING .

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

### **Highway Lane Change Assist precautions**

• Highway Lane Change Assist operates when the turn signal lever is pushed completely. If the turn signal lever is released to the center before stepping on the lane, Highway Lane Change Assist cancels. After stepping on the lane, even if the lever is released to the center, Highway Lane Change Assist does not cancel.

 Highway Lane Change Assist operates when the turn signal lever is pushed slightly. The turn signal indicator blinks until the lane change is complete even when the turn signal lever is released to the center.

### **Highway Lane Change Assist standby**

Highway Lane Change Assist function is in the standby state and the indicator appears in gray when one of the ready state condition is not satisfied, or when entering or driving on one of the following roads.

- Road within a certain distance from the tollbooth on the main road of the highway
- The road ahead ends without an interchange or junction
- Road with sharp curves
- · Road with narrow lanes
- · Road that is under construction
- When the function is in the ready state, and vehicle speed is below about 15 mph (25 km/h), the function changes to the standby state.
- When your vehicle is between 20-40 mph (30-60 km/h), and a vehicle is not detected in the rear area of your vehicle's left and right side lanes, the function changes to the standby state.
- If there is a risk of collision, the function changes to the standby state.

## Highway Lane Change Assist automatic cancellation

Lane Change Assist function turns off automatically and the indicator blinks in white when driven in the following road conditions:

- · HDA is turned off
- LFA or SCC is turned off or temporarily canceled
- · Hands-off warning message is appearing on the cluster
- The hazard warning flasher is turned on
- FCA or BCA warning message is appearing
- Possible collision with a vehicle or road structure, etc., is detected, even though there
  are no warning messages.
- The target lane to make a lane change disappears
- · The lane of target lane is not detected.
- There is a problem with turn signal lights
- Highway Lane Change Assist function is off (The function turns off when the function
  is turned off from the settings menu, when the road changes to a one-way road, when
  there is an intersection or crosswalk ahead, when you enter a road with no structure,
  such as a medium strip, guardrail, etc.,or when there is a pedestrian or cyclist on the
  driving lane.)
- Your vehicle speed is below about 15 mph (25 km/h)
- When your vehicle is between 20-40 mph (30-60 km/h), and a vehicle is not detected in the rear area of your vehicle's left and right side lanes
- If there is a risk of collision with a vehicle in the rear area of your vehicle
- Entering a road under construction



### WARNING

- While the function is operating, when the function is canceled, depending on the driving conditions, the vehicle may drive to the middle of the driving lane or steering assist may stop. Always pay attention to road and driving conditions while driving.
- The function may not operate properly on roads with pedestrians or cyclists, such as an intersection or crosswalk. Always pay attention to road and driving conditions while driving.

## **HDA Settings**



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

- If **Highway Driving Assist** is selected, it helps maintain distance from the vehicle ahead, maintain the set speed, and helps center the vehicle in the lane.
- If Highway Lane Change Assist is selected, it helps the driver change lanes. (if equipped)
- When Highway Driving Assist is deselected, the setting for Highway Lane Change Assist cannot be changed.
- If there is a problem with the functions, the settings cannot be changed. Have your vehicle inspected by an authorized HYUNDAI dealer.
- If the vehicle is restarted, the functions maintains the last setting.



### CAUTION

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

## Warning methods

You can set the following Warning methods for HDA:

- · Warning volume
- Driving safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

## **HDA Malfunction and Limitations**

### HDA malfunction

When HDA or related component malfunctions, a warning message, the Master A warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

## Detecting sensors

HDA uses the following sensors:

- · Front view camera
- · Front radar
- · Front corner radar
- · Rear corner radar

For more information, refer to the 'Sensor Information', 'Forward Collision-Avoidance Assist (FCA)' and 'Blind-Spot Collision-Avoidance Assist (BCA)' section in this chapter.

- The driver is responsible for controlling the vehicle and safe driving.
- · Always have your hands on the steering wheel while driving.
- HDA is a supplemental function that assists the driver in driving the vehicle and is not a
  complete autonomous driving system. Always check road conditions, and if necessary,
  take appropriate actions to drive safely.
- Always have your eyes on the road, and it is the responsibility of the driver to
  avoid violating traffic laws. The vehicle manufacturer is not responsible for any traffic
  violation or accidents caused by the driver.
- HDA may not be able to recognize all traffic situations. HDA may not detect possible
  collisions due to limitations of the function. Always be aware of the limitations of the
  function. Obstacles such as vehicle, motorcyclist, bicycle, pedestrian, or unspecified
  object or structure such as guardrails, tollbooth, etc., that may collide with the vehicle
  may not be detected.
- HDA turns off automatically under the following situations:
  - Driving on roads that HDA does not operate, such as a rest area, intersection, junction, etc.
  - The navigation does not operate properly such as when the navigation is being updated or restarted
- HDA may inadvertently operate or turn off depending on road conditions (navigation information) and surroundings.
- LFA function may be temporarily disabled when the front view camera cannot detect lanes properly or the hands-off warning is on.
- You may not hear the warning sound of HDA if the surrounding is noisy.
- If the vehicle is driven at high speed above a certain speed at a curve, your vehicle may
  drive to one side or may depart from the driving lane.
- When you are towing a trailer or another vehicle, turn off HDA for safety reasons. Your vehicle may lose control stability.
- The hands-off warning message may appear early or late depending on how the steering wheel is held or road conditions. Always have your hands on the steering wheel while driving.
- For your safety, please read the owner's manual before using the HDA.
- HDA does not operate when the vehicle is started, or when the detecting sensors or navigation is being initialized.

#### HDA limitations

When the detecting sensors cannot detect the surroundings, HDA may not operate properly.

HDA and Highway Lane Change function may not operate properly, or may not operate under the following circumstances. Always pay attention to road and driving conditions while driving:

- The map information and the actual road is different because the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error

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

# **Rear View Monitor (RVM)**

## f Equipped

RVM shows the area behind the vehicle to assist you when parking.

## **RVM Operation**

## Turning RVM on/off





- 1. Change View button
- 2. Previous button
- 3. Infotainment system screen button

When the gear is shifted to R (Reverse), RVM turns on and the rear view appears on the screen.

When RVM turns on, touch the View Mode button to select rear view, rear top view, or rear wide view.

RVM turns off under the following circumstances:

- The gear is shifted to P (Park)
- The gear is shifted to N (Neutral) or D (Drive) when the Extended Rear View Monitor is not selected.

#### Extended Rear View Monitor

The rear view maintains showing on the screen to help with safe parking when the gear is shifted from R (Reverse) to N (Neutral) or D (Drive).

If Extended Rear View Monitor is selected, RVM screen stays on under the following circumstances:

- The gear is in P (Park), N (Neutral) or D (Drive)
- The Parking/View button is pressed while the vehicle is driving below 6 mph (10 km/h) or less in D (drive) or N (Neutral)
- The Parking/View button is pressed while the gear is in P (Park)

When Extended Rear View Monitor is operating, touch the View Mode button to select rear view, rear top view, or rear wide view.

Extended Rear View Monitor function turns off under the following circumstances:

- The gear is shifted to P (Park)
- · The Parking/View button is pressed again
- The Previous 🗷 button is selected on the rear view menu
- · One of the infotainment system screen buttons is selected
- The vehicle speed is above 6 mph (10 km/h)

#### Precautions

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

## **RVM Settings**

## Camera settings



2C\_RVMCameraSettings

You can change RVM Display contents by touching the setup icon ♠ on the screen while RVM is operating, or by selecting Setup > Display > Camera Settings > Display Contents in the infotainment system while the vehicle is on.

#### **Display contents**

- When the Extended Rear View Monitor is selected, parking Guide Lines is displayed in the rear view.
- If Rear View Parking Guidance is selected, the rear view parking guide lines and rear
  top view guide lines appears at the rear view area of the infotainment system screen.

- The horizontal marking of the Rear Top View Parking Guidance shows the distance of about 1.6 ft. (0.5 m) and 4.9 ft. (1.5 m) from the vehicle based on the empty vehicle condition.
- The horizontal marking of the Rear Top View Parking Guidance shows the liftgate opening distance and the distance of about 4.9 ft. (1.5 m) from the vehicle based on the empty vehicle condition.
- The horizontal guideline of the Rear View Parking Guidance shows the distance of about 1.6 ft. (0.5 m), 3.3 ft. (1 m) and 7.6 ft. (2.3 m) from the vehicle based on the empty vehicle condition.

## Warning methods

You can set the following Warning methods for RVM:

· Parking safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

#### **RVM Malfunction and Limitations**

## **RVM** malfunction

When RVM malfunctions, the image on the screen may appear green, blue, or black.

When RVM is not working properly, or the screen flickers, or the camera image does not appear properly, have your vehicle inspected by an authorized HYUNDAI dealer.

#### RVM limitations

- When your vehicle is stopped for a long time in winter or your vehicle is parked in an indoor parking lot, the exhaust fumes may temporarily blur the image.
- The screen may appear abnormally under the following circumstances:
  - When the liftgate is open

# Detecting sensors

RVM uses the following sensor:

· Wide-rear view camera

For more information, refer to the 'Sensor Information' section in this chapter.



#### WARNING

- The wide-rear view camera does not cover the complete area behind the vehicle. The driver should always check the rear area directly through the inside rearview mirror and side view mirror before parking or backing up.
- Always keep the camera lens clean. If the lens is blocked or covered, RVM may not
  operate normally. Do not clean with strong chemicals containing high alkaline or
  volatile organic solvents (for example, gasoline, acetone).
- The perceived distance on the screen may differ from the actual distance as the RVM displays the calibrated video of the wide-rear view camera. Also, the parking guide lines may be different from the actual distance if the vehicle is tilted due to cargo load or position. Make sure to directly check the vehicle's surroundings for safety.
- Driving with the liftgate open is abnormal. For your safety, be aware and drive safely.

# **Surround View Monitor (SVM)**

## f Equipped

SVM uses the wide view cameras and images appear around your vehicle through the infotainment system to help with safe parking.

## **SVM Operation**

## Turning SVM on/off





- 1. Change View button
- 2. Previous button
- 3. Infotainment system screen button

SVM turns on under the following circumstances:

- Front view: The gear is shifted to N (Neutral) or D (Drive) from R (Reverse) Rear view: The gear is shifted to R (Reverse)
- The Parking/View button is pressed, while the gear is in P (Park), N (Neutral) or D (Drive), and vehicle speed is 6 mph (10 km/h) or less
- Forward Parking Distance Warning (PDW) warns you while Surround View Monitor Auto
   On is selected

SVM function turns off under the following circumstances:

- The gear is shifted from R (Reverse), N (Neutral) or D (Drive) to P (Park)
- The gear is in P (Park), N (Neutral) or D (Drive)
- Vehicle speed is above 6 mph (10 km/h)

- · The Parking/View button is pressed
- The Previous 
  button is selected on the surround view menu
- · The Infotainment system button is pressed

## Selecting Front view/Rear view

Front view/Rear view can be changed by shifting the gear.

You may select the view using the View Mode button.

- When the gear shifted to R (Reverse), you can select rear top view, rear view, or rear side view.
- When the gear shifted to P (Park), N (Neutral) or D (Drive), you can select front/rear top view, front/rear view, or front/rear side view.



#### **Precautions**

- When the front view/rear view is activated, the latest used view mode appears.
- When the gear is in R (Reverse), the rear view always appears.
- When the gear is in R (Reverse), the rear view does not turn off even if the infotainment system button is pressed.

#### 3D view



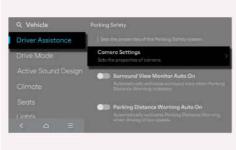
When the 3D view is selected by pressing the View Mode button, the gear is in R (Reverse), P (Park), N (Neutral) or D (Drive) when vehicle speed is below 6 mph (10 km/h).

#### **Precautions**

- 3D view does not show guidelines.
- The top view screen appearing with front/rear view or 3D view converts the original image input from the four wide-angle cameras to provide a 360-degree image of the surroundings of the vehicle looking down.
- The top view does not appear with the front/rear wide view.
- The top view zoom-in can be set to pinch-in/out adjustment within the top view area.

## **SVM Settings**

### Camera settings



2C\_SVMCameraSettings

You can change SVM **Display contents** by touching the setup **♣** icon on the screen while SVM is operating, or by selecting **Setup** > **Vehicle** > **Driver Assistance** > **Parking Safety** > **Camera Settings** in the infotainment system while the vehicle is on.

### **Display contents**

- When the **Parking Distance Warning** is selected, parking guidance warning appears on the top view area on right side of the SVM screen.
- When the Top View Parking Lines is selected, parking guidance appears on the top view area of the SVM screen when the front top view and rear top view appears.
  - The horizontal marking of the Rear Top View Parking Guidance shows the liftgate opening distance and the distance of about 6.6 ft. (2 m) from the vehicle based on the empty vehicle condition.
- When the Rear View Parking Lines is selected, parking guidance appears in the rear view.
  - The horizontal guideline of the Rear View Parking Guidance shows the distance of about 1.6 ft. (0.5 m.), 3.3 ft. (1 m) and 7.6 ft. (2.3 m) from the vehicle based on the empty vehicle condition.

#### Surround View Monitor Auto On

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

When **Surround View Monitor Auto On** is selected, SVM turns on automatically if the Forward Parking Distance Warning operates. However, when SVM is turned off by pressing the Parking/View button or the infotainment system button, the system does not activate.

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

## Warning methods

You can set the following Warning methods for SVM:

Parking safety priority

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

### **SVM Malfunction and Limitations**

#### SVM malfunction

When SVM malfunctions, the image on the screen may appear green, blue, or black. When SVM is not working properly, or the screen flickers, or the camera image does not appear properly, have your vehicle inspected by an authorized HYUNDAI dealer.

#### SVM limitations

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

## **Detecting sensors**

SVM uses the following sensors:

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

For more information, refer to the 'Sensor Information' section in this chapter.



- The image shown on the screen may differ from the actual distance of the object. Also, the parking guide lines may not be accurate if the vehicle is tilted due to cargo load or position. Make sure to directly check the vehicle's surroundings for safety.
- SVM is designed to be used on a flat surface. Therefore, if used on roads with different heights such as curbs and speed bumps, the image in the screen may not look correct.
- Always keep the camera lens clean. If the lens is blocked or covered, RVM may not operate normally. Do not clean with strong chemicals containing high alkaline or volatile organic solvents (for example, gasoline, acetone).
- Driving with the liftgate open is abnormal. For your safety, be aware and drive safely.

# Rear Cross-Traffic Collision-Avoidance Assist (RCCA)

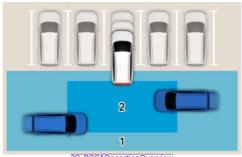
RCCA helps detect vehicles approaching from the rear left or right while your vehicle is reversing and warns you of a possible collision with a warning message and a warning sound. Also, RCCA may assist with braking your vehicle to help avoid a collision.



## CAUTION

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

## **RCCA Operation**



2C RCCAOpeartionOverview

- 1. Rear Cross-Traffic Collision Warning operating range
- 2. Rear Cross-Traffic Collision-Avoidance Assist operating range



2C SideMirrorWaringLamp 2



2C RCCAEmergencyBrakingInfo

To warn the driver of an approaching vehicle from the rear left/right side of your vehicle, the warning light on the side view mirror will blink and a warning will appear on the instrument cluster. At the same time, an audible warning sounds. If Rear View Monitor (RVM) is operating, a warning also appears on the infotainment system.

RCCA operates when all the following conditions are satisfied:

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

Braking control ends about 2 seconds after your vehicle is stopped following an emergency braking event. For your safety, the driver should depress the brake pedal immediately and check the surroundings.

- During emergency braking, braking control by RCCA automatically cancels when the driver excessively depresses the brake pedal.
- After shifting the gear to R (Reverse), braking control operates once for left and right vehicle approach.

- · Brake control ends when:
  - The approaching vehicle is out of the detecting range
  - The approaching vehicle passes behind your vehicle
  - The approaching vehicle does not drive toward your vehicle
  - The approaching vehicle speed slows down
  - The driver depresses the brake pedal with sufficient power
- If RCCA is operated, Brake control ends when the driver depresses the accelerator pedal with sufficient power.
- RCCA does not operate in all situations or cannot avoid all collisions.
- RCCA may warn the driver late or may not warn the driver depending on the road and driving conditions.
- The driver has the responsibility to control the vehicle. Do not solely depend on RCCA. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate RCCA on people, animal, objects, etc. It may cause serious injury or death.
- Depending on the status of Electronic Stability Control (ESC), brake control may not operate properly and only a warning is provided when:
  - The ESC warning light is on
  - ESC is engaged in a different function
- If any other system's warning message appears or audible warning is generated, RCCA warning message may not appear and audible warning may not be generated.
- You may not hear the warning sound of RCCA if the surrounding is noisy.
- · During RCCA operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- RCCA may not operate if the driver applies the brake pedal to avoid collision.
- Even if there is a problem with RCCA, the vehicle's basic braking performance operates properly.

## **RCCA Settings**

## Rear cross-traffic safety



2C\_RCCASettings

With the vehicle on, select Setup > Driver Assistance > Parking Safety > Rear Cross-Traffic Safety in the infotainment system to turn on RCCA and deselect to turn off the function.



### MARNING

When the vehicle is restarted, RCCA always turn on. However, if Rear Cross-Traffic Safety is deselected after the vehicle is restarted, the driver should always be aware of the surroundings and drive safely.



# **CAUTION**

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

## Warning methods

You can set the following Warning methods for RCCA:

- · Warning volume
- Haptic warning

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

## **RCCA Malfunction and Limitations**

#### RCCA malfunction

When RCCA or related component malfunctions, a warning message and the Master A warning light appears on the instrument cluster. Also, when the rear view mirror is not working properly, a warning message and the Master /\ warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.



## CAUTION

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

## Detecting sensors

RCCA uses the following sensor:

· Rear corner radars

For more information, refer to the 'Sensor Information' and 'Blind-Spot Collision-Avoidance Assist (BCA)' section in this chapter.

### RCCA limitations

RCCA may not operate properly, or it may operate unexpectedly under the following circumstances:

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

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

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



- · In the following cases, the vehicle approaching from the rear left or right may not be detected. RCCA may be limited and may not warn or assist in braking. Always check your surroundings and drive carefully.
  - When your vehicle is backing up and there is a driving vehicle or structure nearby



2C\_RCCADrivingNearVehicle

#### Structure

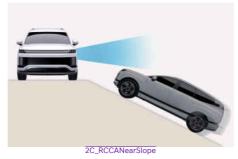
- When the vehicle is in a complex parking environment (for example, a vehicle leaving beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.)



- When your vehicle backing up diagonally



- When your vehicle backing up on or near a slope



- Pulling into the parking space where there is a structure that can reflect electric waves



- 1. Structure
- 2. Wall
- When the vehicle is parked rearward



- When you are towing a trailer or another vehicle, turn off RCCA for safety reasons.
- RCCA may not operate properly if interfered by strong electromagnetic waves.
- RCCA may not operate for 3 seconds after the vehicle is started, or the rear corner radars are initialized.
- If the vehicle is turned off and restarted while the radar is blocked or malfunctioned, the condition is maintained. Therefore, RCCA may not operate properly.

# **Parking Distance Warning (PDW)**

PDW uses the front, side (if equipped), and rear ultrasonic sensors to help detect and warn you if a person, animal, or object is within a certain distance when your vehicle is stopped or driving at low speed.

## **PDW Operation**

## Turning PDW on/off



Press the Parking Safety  $P_{w}$  button to turn on PDW. Press the button again to turn off the function.

- When the gear is shift to R (Reverse), PDW automatically turns on (Parking Safety button indicator on).
- For your safety, when the gear is in R (Reverse), PDW does not turn off even if you press the Parking Safety P<sub>™</sub> button.

## Parking Distance Warning

Distance from object	Cluster warning indicator			Morning
	Forward	Side (if equipped)	Reverse	Warning sound
24-48 in. (60-120 cm)				Buzzer beeps intermittently (not generated for front outer side)
12-24 in. (30-60 cm)				Buzzer beeps more frequently
within 12 in. (30 cm)				Buzzer beeps continuously

- The corresponding indicator illuminates whenever each ultrasonic sensor detects a person or object in its sensing range. Also an audible warning sounds.
- When more than two objects are detected at the same time, the closest one is warned with an audible warning.

- When Rear View Monitor (RVM) or Surround View Monitor (SVM) is on (with PDW turned on), PDW appears on the infotainment system.
- The shape of the indicator in the illustration may differ from the actual vehicle.

Forward Parking Distance Warning activates under the following conditions.

- The gear is shifted from R (Reverse) to D (Drive)
- The gear is in D (Drive) and the Parking Safety P<sub>2</sub> button (indicator light is on)
- The gear is shifted to D (Drive) when the function is off (Only when Vehicle > Driver assistance > Parking safety > Parking Distance Warning Auto On is selected in the infotainment system.)
- Forward Parking Distance Warning activates only when the vehicle's forward speed is below 6 mph (10 km/h)
- If Parking Distance Warning Auto On is not selected, Forward Parking Distance Warning turns off (Parking Safety button indicator off) when the vehicle speed reaches above 18 mph (30 km/h). It does not automatically turn back on although the vehicle speed drops below 6 mph (10 km/h).
- While the gear is in R (Reverse), Forward Parking Distance Warning warns only the front outer side area (within 24 in. (60 cm)).
- When the distance from the vehicle to the object is above 24 in. (60 cm), the front outer side area warning does not appear in the instrument cluster.

Side Parking Distance Warning activates under the following conditions. (if equipped)

- Side Parking Distance Warning activates only when Forward or Reverse Parking Distance Warning is on.
- Side Parking Distance Warning activates when the vehicle's forward speed is below 6
  mph (10 km/h).
- If an object located within 12 in. (30 cm) from the side of the vehicle's path is detected, an audible warning sounds.
- If an object outside the side of the vehicle's path is detected, the warning indicator appears.
- When the gear is in D (Drive) and an object is only detected on the side, which is not located within 12 in. (30 cm), the warning does not appear on the instrument cluster.

Reverse Parking Distance Warning activates under the following conditions. Reverse PDW operates under the following conditions.

## **PDW Settings**

## Parking Distance Warning Auto On

While driving at low speed, you can set Parking Distance Warning always turns on. With the vehicle on, select **Setup > Vehicle> Driver Assistance > Parking Safety > Parking Distance Warning Auto On** in the infotainment system.

 When Parking Distance Warning Auto On is selected, the Parking Safety P<sub>™</sub> button indicator stays on.



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

## Warning methods

You can set the following Warning methods for PDW:

· Warning volume

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

#### **PDW Malfunction and Limitations**

#### PDW malfunction and sensor obscured

When PDW or related component malfunctions, a warning message or warning light appears on the instrument cluster. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

## Detecting sensors

PDW uses the following sensors:

- · Front ultrasonic sensors
- Front side ultrasonic sensors (if equipped)
- · Rear ultrasonic sensors
- Rear side ultrasonic sensors (if equipped)

For more information, refer to the 'Sensor Information' section in this chapter.

#### PDW limitations

When the detecting sensors cannot detect the surrounding situations, PDW may not operate properly.

PDW may malfunction when:

- · Heavy rain or water spray is present
- Affected by another vehicle's sensors
- Driving on uneven road, gravel roads or bushes
- License plate is installed in a different spot from the original location
- An unofficial license plate is installed
- The vehicle bumper height or ultrasonic sensor installation has been modified
- Attaching equipment or accessories next to the ultrasonic sensors
- A trailer or carrier is installed on the rear of your vehicle

The following objects may not be detected:

• Sharp or slim objects, such as ropes, chains or small poles

#### 777 Driver Assistance System

- Narrow objects, such as corners of a square column
- Objects smaller than 40 in. (100 cm) in length and narrower than 6 in. (14 cm) in diameter
- Objects, which tend to absorb sensor frequency, such as clothes, spongy material or
- Pedestrians, animals or objects that are very close to the ultrasonic sensors
- An object in the side space between the front corner ultrasonic sensor and the rear corner ultrasonic sensor or an object approaching the side space



### WARNING

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

# Parking Collision-Avoidance Assist (PCA)

## f Equipped

PCA can warn the driver and assist with braking to help reduce the possibility of collision with a pedestrian or an object while driving at low speed.

PCA can detect a pedestrian or an object when:

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

## **PCA Operation**

## Turning PCA on/off



Press and hold the Parking Safety Pv button to turn the Reverse PCA on or off.

When PCA detects a risk of collision around the vehicle with a pedestrian or an object, if collision is imminent, PCA assists with braking and warns the driver with an audible warning, a warning message on the instrument cluster, and steering wheel vibration.

- PCA activates only once after shifting the gear to R (Reverse) or D (Drive). To reactivate PCA, shift the gear from another gear to R (Reverse) or D (Drive).
- · When PCA is activated while reversing, braking control is released after 5 minutes and the EPB is engaged.
- When PCA activates, a line appears behind the vehicle image in the instrument cluster.
- If Surround View Monitor (SVM) is operating, a warning appears on the infotainment screen.



### WARNING

If PCA turns off, you cannot get help from PCA, Always pay attention when driving your vehicle.



2C\_PCAOnInfo\_3

## Front/Side Safety

### tif equipped

Front/Side Safety of PCA activates when the following conditions are satisfied:

- Rear Safety and Front/Side Safety is selected from the Parking Safety settings menu in the infotainment system
- The liftgate and door are closed
- · The Electronic Parking Brake (EPB) is released
- Vehicle speed is below 2 mph (4 km/h) (for pedestrians, objects)

Braking assist is deactivated after 2 seconds when the gear is in D (Drive). Immediately depress the brake pedal and check vehicle surroundings. Braking assist is also released in the following conditions when:

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

## Rear Safety

Rear Safety of PCA activates when the following conditions are satisfied:

- The liftgate and door are closed
- The parking brake is released
- The gear is shifted to R (Reverse)
- Vehicle speed is below 6 mph (10 km/h) (detecting pedestrians)
- Vehicle speed is below 2.4 mph (4 km/h) (detecting objects)

Braking assist is deactivated after 5 minutes when the gear is in R (Reverse). Immediately depress the brake pedal and check vehicle surroundings. Braking assist is also released in the following conditions when:

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

## **PCA Settings**

## Parking safety



2C RCCASettings

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

- If Front/Side Safety is selected, PCA warns the driver and assist with braking when a collision with a pedestrian or an object is imminent from the front or the side.
- If Rear Safety is selected, PCA warns the driver and assist with braking when a collision with a pedestrian or an object is imminent from behind.
- Forward/Side Safety can be selected only when Rear Safety is selected.
- If the vehicle is restarted. Rear Safety is selected as default and Forward/Side Safety maintains the last setting.
- If the vehicle is restarted, Rear Safety is selected as default and Rear Safety maintains the last setting.



### CAUTION

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

## Warning methods

You can set the following Warning methods for PCA:

- · Warning volume
- · Haptic warning

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

## **PCA Malfunction and Limitations**

#### PCA malfunction

When PCA or related component malfunctions, a warning message appears on the instrument cluster. When PCA is activated, the direction of the malfunction appears. When the detecting sensors are obscured, the system may be temporarily limited or disabled. The system operates properly when foreign material is removed form the

sensors. If the system does not operate properly after it is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

For more information, refer to the 'Driver Assistance System Warnings and Indicators' section in this chapter.

## Detecting sensors

PCA uses the following sensors:

- Wide-front view camera (if equipped)
- Wide-side view camera (below the rear view mirror) (if equipped)
- · Wide-rear view camera
- · Front ultrasonic sensors
- Front corner ultrasonic sensors (if equipped)
- Rear ultrasonic sensors
- Rear corner ultrasonic sensors (if equipped)

For more information, refer to the 'Sensor Information' section in this chapter.

## PCA limitations

When the detecting sensors cannot detect the surrounding, PCA may not operate properly.

PCA may not assist braking or warn the driver under the following circumstances:

- · Problems with vehicle
  - Any non-factory equipment or accessory is installed
  - Modified braking system components such as brake discs, calipers, etc.
  - Wheel alignment have problems or suspension components have been modified
  - Accessories are attached to the steering wheel, or steering components have been modified
  - Rear wheel steering system (if equipped) is disabled
  - Your vehicle is unstable due to a crash or other causes
  - Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
  - The vehicle is installed with a snow chain, spare tire or different size wheel
- Problems with the surroundings
  - There is a pattern on the road
  - There is shadow or light reflecting on the ground
  - Pedestrians or objects are around the path of the vehicle
  - Your vehicle is backing towards a narrow passage or parking space
  - Your vehicle is backing towards an uneven road surface, such as an unpaved road, gravel, bump, gradient, etc.
  - A trailer or carrier is installed on the rear of your vehicle
  - Wide view camera(s) is obscured by a light source or by inclement weather, such as heavy rain, fog, snow, etc
  - The surrounding is very bright or very dark
  - Outside temperature is very high or very low

- The wind is either strong (above 12 mph (20 km/h)) or blowing perpendicular to the rear bumper
- Objects generating ultrasonic noise, such as vehicle horns, loud motorcycle engines or truck air brakes, are near your vehicle
- An ultrasonic sensor with similar frequency is near your vehicle
- The road is slippery or inclined
- · Problems with pedestrian or object
  - The pedestrians are difficult to detect
  - There is ground height difference between the vehicle and the pedestrian
  - The image of the pedestrian in the front view camera is indistinguishable from the background
  - The pedestrian is near the rear edge of the vehicle
  - The pedestrian is not standing upright
  - The pedestrian is either very short or very tall to detect
  - The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
  - The pedestrian is wearing clothing that does not reflect ultrasonic waves well
  - Size, thickness, height, or shape of the object does not reflect ultrasonic waves well (for example, low object, narrow object, circular pillar, small pillar, corners of a square pillar, bush, curbs, carts, edge of a wall, etc.)
  - The pedestrian or the object is moving
  - The pedestrian or the object is very close to the rear of the vehicle
  - There is a large object such as a wall is behind the pedestrian or the object
  - The object is not located at the front or rear center of your vehicle
  - The object is not parallel to the rear bumper
- · Problems with driving condition
  - The driver drives the vehicle immediately after shifting to R (Reverse) or D (Drive)
  - The driver accelerates or circles the vehicle

- Always exercise extreme caution while driving. The driver is responsible for braking and safe driving
- Always look around your vehicle to make sure there are no pedestrians or objects before moving the vehicle.
- The performance of PCA may vary under certain conditions. If vehicle speed is above 2 mph (4 km/h), PCA provides collision avoidance assist only when pedestrians are detected. Always look around and pay attention when driving your vehicle.
- Some objects may not be detected by the rear ultrasonic sensors due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.
- PCA may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings. Always pay attention when driving your vehicle.
- Do not solely rely on PCA. Doing so may lead to vehicle damage or injuries.
- Always keep the wide-rear view cameras and ultrasonic sensors clean.
- Noise may be heard when sudden braking occurs to avoid a collision.
- If any other warning sound such as the seat belt warning chime is already generated, PCA warning may not sound.
- PCA may not work properly if the bumper has been damaged, replaced or repaired.
- PCA may not operate properly if interfered by strong electromagnetic waves.
- Playing the vehicle audio system at high volume may prevent passengers from hearing PCA warning sounds.
- The brake control may not operate properly depending on the status of Electronic Stability Control (ESC).
  - The ESC warning light is on
  - ESC is engaged in a different function
- Check the brake fluid and brake pad condition periodically. Depending on the condition, brake operation performance may reduce.

# Remote Smart Parking Assist 2 (RSPA 2)

## f Equipped

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

RSPA helps the driver remotely move the vehicle forward or backward from the outside and also helps with perpendicular reverse parking or parallel reverse parking from outside or inside the vehicle.

## **RSPA Operation**

#### RSPA button

#### Parking/View button



Press and hold the Parking/View [P] button to turn on RSPA. Also, Parking Distance Warning (PDW) and Surround View Monitor (SVM) automatically turns on.

System operation may differ depending on the situations. For more information, refer to each system description.

### Forward/Backward button (Smart key)



2C RSPASmartKeyButton

When using Remote Parking function, parking is supported while the 🖟 or 🛱 button is pressed, regardless of the button direction. When using the Remote Operation function, the vehicle moves in the direction of the at or at button while the button is pressed.

System operation may differ depending on the situations. For more information, refer to each system description.

## Remote Operation

and lock all doors.

The function can be operated from outside the vehicle using the smart key. Following is an example of using Remote Operation.

Using the function with vehicle off

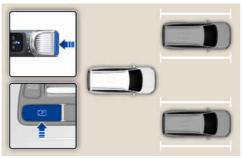


- 1. Within a certain range from the vehicle press the door lock ⊕ button on the smart key
- 2. Press and hold the Remote Start  $\mathcal{Q}$  button within 4 seconds until the vehicle starts.
- 3. Hold down the Forward 🖟 or Backward 🛱 button until the vehicle reaches the target location.
  - When remotely moving forward with the vehicle off, it is recognized as a departure scenario. After the vehicle moves about 13 ft. (4 m) forward, the steering wheel is controlled according to the surroundings, checking for pedestrians, animals or objects around the vehicle.
  - For moving remotely backward, the steering wheel is aligned first, and then the vehicle only moves straight.
- 4. When the vehicle reaches the target location and the door is opened, the vehicle automatically shifts to P (Park), parking brake engages, but the vehicle remains on. You can drive the vehicle when you get on the vehicle with the smart key.

#### INFORMATION

For more information on remotely starting the vehicle, refer to the 'Start/Stop button' section in chapter 6.

## Using the function with vehicle on



2C RemoteForwardRewardProcedure 2

- 1. Park the vehicle in front of the space where you want to use Remote Operation function, and shift the gear to P (Park).
- 2. Press and hold the Parking/View [P] button to turn on RSPA. A message 'Under Remote Control' appears on the infotainment system.
  - · When operating the function with the vehicle on, it can be used after the vehicle has been driven above 3 mph (5 km/h).
  - When remotely moving forward with the vehicle on, it is recognized as a parking scenario. The steering wheel is controlled according to the surroundings, and your vehicle aligns and enters the parking space.
- 3. Get out of the vehicle with the smart key and close all doors and liftgate.
- 4. Hold down the Forward 🖟 or Backward 🖟 button until the vehicle reaches the target location.
  - The function performance may be reduced depending on the pedestrians, animals, and objects near your vehicle or other factors.
  - While the infotainment system guides you through remote operation, press the Parking/View [P] button, shift the gear to another gear from P (Park), press the Parking Safety Pn button or select Cancel on the infotainment system to turn off Remote Operation.
- 5. When the vehicle reaches the target location and the door is opened, the vehicle automatically shifts to P (Park), Electronic Parking Brake (EPB) engages, but the vehicle remains on. You can drive the vehicle when you get on the vehicle with the smart key.
  - When the vehicle reaches the target location and the Remote Start 🚨 button is pressed, the vehicle automatically shifts to P (Park), EPB engages, and the vehicle turns off.

# **♠** ∨

### WARNING

- Before starting moving the vehicle with the Remote Operation function from the outside of the vehicle, make sure that all passengers have gotten out of the vehicle.
- If the vehicle's battery is discharged or RSPA malfunctions when parked in a narrow parking space, Remote Operation function does not operate. Always park your vehicle in a space wide enough for you to get in or out of your vehicle.
- After parking, the surrounding may change due to the movement of surrounding vehicles. If this occurs, Remote Operation function may not operate. If you need to change the vehicle's position or location, manually complete parking your vehicle.
- Before leaving the vehicle, close windows and sunroofs, and make sure the vehicle is
  off before locking the doors.

### **Remote Operation precautions**

- If you use the Remote Operation function with vehicle on, Agree must be selected on the infotainment system screen and the infotainment system has to operate properly.
- Check that all smart keys are outside the vehicle when using Remote Operation function.
- Remote Operation function operates only when the smart key is within 13 ft. (4 m)
  from the vehicle. If there is no vehicle movement even when the Forward or Backward
  button is pressed on the smart key, check the distance to the vehicle and press the
  button again.
- The detection range of the smart key may differ depending on radio waves in the area such as transmission towers or broadcast stations.
- The function performance may be reduced depending on the pedestrians, animals, and objects near your vehicle or other factors.

## Smart Parking, Remote Parking

To use perpendicular reverse parking, diagonal reverse parking, and parallel reverse parking function, press and hold the Parking/View button from inside the vehicle or use the smart key from outside the vehicle.

Following is an example of Smart Parking and Remote Parking.

#### **Available functions**

Perpendicular reverse parking



Diagonal reverse parking



#### **Available functions**

#### Parallel reverse parking



## 1. Turning RSPA on

With the vehicle on, depress the brake pedal and shift the gear to D (Drive) or N (Neutral). Press and hold the Parking/View D button to turn on RSPA.

## 2. Searching for parking space



2C SearchParkingSpace

Slowly drive forward maintaining the distance of about 40 in. (100 cm) from the parked vehicles. RSPA searches for parking lines or parking spaces that are next to parked vehicles, or parking spaces with parked vehicles in front or rear.

When searching for a parking space is complete, a message appears on the infotainment system with an audible sound to notify the search is complete. 'Parking Space Detected' appears on the infotainment system and the selected parking space appears on Top View screen of SVM.

## 3. Selecting parking type



2C\_SelectParkingTypeAndFunction

 Parking type: Perpendicular reverse (Left/Right), Parallel reverse (Left/Right), Diagonal reverse (Left/Right) With the vehicle stopped by depressing the brake pedal, touch the infotainment system to select the desired parking type.

## 4. Selecting operating mode



2C\_SelectParkingType

Operating mode: Remote Parking, Smart Parking
 After selecting a parking type, the infotainment system guides you with Remote
 Parking function and Smart Parking function. Follow the instructions to operate RSPA.

## · Remote Parking



2C\_RemoteParkingInstructions

- 1. Depress the brake pedal and shift the gear to P (Park).
- 2. Get out of the vehicle with the smart key, and close all doors.
- 3. Press one of the Forward & or Backward b button on the smart key.
  - While pressing the button, RSPA automatically controls the steering wheel, vehicle speed and gearshift.
  - While Remote Parking function is operating, if you do not hold down the button, the vehicle stops and function control pauses. The function starts operating again when the button is pressed and held again.
- 4. Press and hold the Forward & or Backward b button until parking is completed.
  - When the vehicle reaches the target parking location, a message appears on the infotainment system to inform you that parking is complete. The vehicle automatically shifts to P (Park), EPB engages, and the vehicle turns off.
- 5. If you need to change the vehicle's position or location, manually complete parking your vehicle.

## Smart Parking





- 1. Press the Parking/View [P] button when the vehicle is stopped by depressing the brake pedal.
- 2. Release the brake pedal while pressing the Parking/View [P] button.
  - RSPA automatically controls the steering wheel, vehicle speed and gearshift
  - While Smart Parking function is operating, if you do not hold down the Parking/ View D button, the function stops and function control pauses. The function starts operating again when the Parking/View D button is pressed and held again.
- 3. Press and hold the Parking/View [P] button until parking is completed.
  - When the vehicle reaches the target parking location, a message appears on the infotainment system to inform you that parking is complete. The vehicle automatically shifts to P (Park) and EPB engages.
- 4. If you need to change the vehicle's position or location, manually complete parking your vehicle.

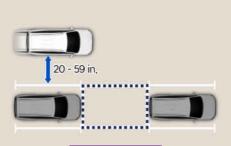
How to turn off Parking function while operating

- Press the Parking Safety P<sub>™</sub> button or select Cancel on the infotainment system to turn
  off Parking function.
- Press the Parking/View P button in the following stage:
  - Searching for parking space
  - Selecting parking type
- Shift the gear to R (Reverse) in the following stage:
  - Searching for parking space

- Selecting parking type
- Selecting operating mode
- While Smart Parking function is operating, if the vehicle is stopped by depressing the brake pedal, and the gear is shifted, Parking function turns off. At this time, EPB is not engaged.
- While Remote Parking function is operating, Press the Remote Start 🚨 button on the smart key.

### **Smart Parking, Remote Parking precautions**

- Agree must be selected on the infotainment system screen and the infotainment system has to operate properly to use Parking function.
- If the vehicle has been driven above 3 mph (5 km/h), the function judges the situation as parking.
- RSPA can only search for parking spaces when parking lines are visible or when there
  are parked vehicles.
- The empty spaces created after driving or the empty spaces in front of a vehicle that
  has not yet been driven cannot be searched as the a parking space.
- If there is enough space to park the vehicle, RSPA also recognize it as a parking space.
- While searching for a parking space, when vehicle speed is above 12 mph (20 km/h), a message appears on the infotainment system informing you to slow down. When vehicle speed is above 18 mph (30 km/h), Parking function turns off.
- Even though searching for a parking space is completed, if you keep driving, RSPA searches for another parking space again.
- If the distance is below 20 in. (50 cm) or over 59 in. (150 cm), RSPA may not be able to search for a parking space.



2C\_ParkingSpaceDistance

- If you do not maintain a certain distance from the parked vehicle, the performance to search for a parking space may reduce.
- Due to abnormal performance of the ultrasonic sensor or the influence of the surroundings, Parking function may not be able to search for a parking space even if there is a parking space, or may search for a space that is not suitable for parking.
- If the parking space is on a incline or is diagonal, the parking type may appear different from the actual parking type which should be selected. If this occurs, do not select the parking type, and search for another parking space.
- If you continue to drive without stopping after the parking type selection screen appears, RSPA returns to the previous stage and search for a parking space.

- If Parking function is canceled unintentionally by pressing the Parking/View [P] button before the parking type is selected, you can return to the parking type selection stage by pressing and holding the button again while the vehicle is stopped.
- Do not take your foot off the brake pedal during the Parking function guide. When the vehicle moves. RSPA turns off.
- Operating instructions appears on the screen for each desired function you select.



2C SmartParkingInstructions

If RSPA cannot activate Remote Parking function, only the Smart Parking guide appears on the infotainment system.

- · When operating Remote Parking function, make sure all smart keys are outside of the vehicle.
- Remote Parking function operates only when the smart key is within 13 ft. (4 m) from the vehicle. If there is no vehicle movement even when the Remote Forward or Backward button is pressed on the smart key, check the distance to the vehicle and press the button again.
- The detecting range of the smart key may vary depending on the surroundings that are affected by radio waves such as transmission tower, broadcast station, etc.
- The parking location indicator appears on SVM screen and appears until the vehicle enters the parking space for the first time by Remote Parking function.
- Depending on parking environments, if the vehicle is stopped by a stopper, parking may be completed.
- Vehicle speed can be adjusted by depressing the brake pedal while Smart Parking function is operating. The vehicle does not accelerate even when the accelerator pedal is depressed.
- Make sure that no smart key remain in the vehicle before you start moving the vehicle with the remote parking function outside the vehicle. Remote parking does not work if there is an extra smart key in the vehicle.

**MARNING** 

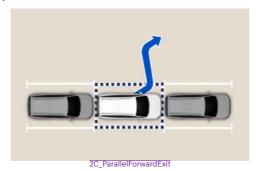
Before selecting the Parking type, the driver should check whether the parking space is suitable. If the searched parking space by RSPA is narrow or unsuitable for parking, do not select the Parking type and move the vehicle to search for another parking space.

- Before starting moving the vehicle with the remote parking function from the outside of the vehicle, make sure that all passengers have gotten out of the vehicle.
- Before leaving the vehicle, close windows and sunroofs, and make sure the vehicle is off before locking the doors.

#### Smart Exit

Press and hold the Parking/View [P] button to use parallel forward exit function from inside the vehicle.

Following is an example of Smart Exit.



# 1. Turning RSPA on

With the vehicle on, depress the brake pedal and shift the gear to P (Park) or N (Neutral). Press and hold the Parking/View [P] button to turn on RSPA.

# 2. Checking space



2C\_CheckingSpace

When the vehicle is stopped by depressing the brake pedal, the vehicle sensors detects the distance from nearby objects and check for space to exit.

When checking for space is complete, a message appears on the infotainment system with an audible sound to notify the search is complete.

## 3. Selecting exit direction



2C SelectExitDirection

With the vehicle stopped by depressing the brake pedal, touch the infotainment system to select the desired exit direction.

#### 4. Smart Exit



- 1. Press the Parking/View P button when the vehicle is stopped by depressing the brake pedal.
- 2. When the Parking/View P button is pressed, release the brake pedal according to the instructions.
  - RSPA automatically controls the steering wheel, vehicle speed and gearshift.
  - While Smart Exit function is operating, if you do not hold down the Parking/View D button, the vehicle stops and function control pauses. The function starts operating again when the Parking/View D button is pressed and held again.
- 3. Press and hold the Parking/View [P] button until exiting is completed.
  - When the vehicle reaches the target exit location, a message appears on the infotainment system to inform you that exit is completed.
  - If there is no vehicle operation such as depressing the brake pedal or accelerator pedal within 4 seconds after exit is complete, the vehicle automatically shifts to P (Park) and EPB engages.

How to turn off Smart Exit function while operating

- Press the Parking Safety P<sub>™</sub> button or select Cancel on the infotainment system to turn
  off Parking function.
- Press the Parking/View D button or Shift the gear to R (Reverse) in the following stage:

- Checking space
- Selecting exit direction
- · While Smart Exit function is operating, if the vehicle is stopped by depressing the brake pedal, and the gear is shifted, Exiting function turns off. At this time, EPB is not engaged.



### MARNING

- The function pauses in the following conditions when there is a pedestrian, animal or object in the direction the vehicle is moving.
- Even if check for space is completed, objects in the blind spot area cannot be detected by the sensors. The driver must directly check the blind spot area and continue using the function.
- Before selecting the exit direction, the driver should check whether the parking space is suitable. If the searched parking space by RSPA is narrow or unsuitable for parking. do not select the Parking type and move the vehicle to search for another parking space.

## **Smart Exit precautions**

- The vehicle should not have been driven above 3 mph (5 km/h) for the function to judge the situation as exiting.
- Agree must be selected on the infotainment system screen and the infotainment system has to operate properly to use Smart Exit function.
- If the function is turned on again after parallel parking is completed by RSPA, Smart Exit function can be used.
- Due to abnormal performance of the ultrasonic sensor or the influence of the surroundings, Smart Exit function may not search for a exit space even if there is a exit space, or may search for a space that is not suitable for exiting. For more information, refer to the 'RSPA Malfunction and Limitations' in this chapter.
- Vehicle speed can be adjusted by depressing the brake pedal while Smart Exit function is operating. The vehicle does not accelerate even when the accelerator pedal is depressed.
- If exit is completed while the driver is depressing the brake pedal, RSPA maintains the gear in D (Drive).
- If exit is completed while depressing the accelerator pedal, you must take your foot off the accelerator pedal once for the accelerator pedal to operate.
- After Smart Exit function is complete, always check the surroundings before driving.

# Function operation status

- The Remote Operation function shows the operating status with the Smart key LED and hazard warning light.
- The Remote Parking function shows the operating status with the Smart key LED and hazard warning light. During the first reverse, the turn signal light blinks in the parking direction.

Operation status	Smart key LED	Hazard warning light	Turn signal
Under control	Green LED continuously blinks	-	The turn signal of the parking direction blinks until the first reverse is complete.
Pause	Red LED continuously blinks	Blinks	-
Off	Red LED illuminates for 4 seconds and then turns off	Blinks 3 times and turns off	-
Complete	Green LED illuminates for 4 seconds and then turns off	Blinks 1 time and turns off	-

- When Smart Parking is operating, the turn signal of the parking direction blinks until the first reverse is complete.
- When Smart Exit is operating, the turn signal of the exit direction blinks until the exit is complete or canceled.

# Temporarily pausing RSPA

RSPA pauses in the following conditions when:

- There is a pedestrian, animal or object in the direction the vehicle is moving
- · The door or liftgate is open
- During Remote Operation, Remote Parking operation
  - The Forward fit or Backward fit button is not continuously pressed
  - Simultaneously pressing multiple buttons on a smart key
  - The smart key is not operated within 13 ft. (4 m) from the vehicle
  - Button of another smart key is pressed in addition to the operating smart key (except Remote Start button)
  - Blind-Spot Collision-Avoidance Assist (BCA), Parking Collision-Avoidance Assist (PCA) or Rear Cross-Traffic Collision-Avoidance Assist (RCCA) operates when your vehicle is backing while remotely controlled.
  - Your vehicle moves about 22 ft. (7 m) while the smart key button is pressed with Remote Operation function (maximum travel distance per button press).
- · During Smart Parking, Smart Exit operation
  - The driver's seat belt is not fastened
  - PCA or RCCA operates while the vehicle is being controlled in the reverse direction
  - The Parking/View [P] button is not continuously pressed
  - The vehicle is stopped by depressing the brake pedal

#### RSPA canceled

RSPA is canceled in the following conditions when:

- The steering wheel is turned
- The gear is shifted while the vehicle is moving
- EPB is operated while your vehicle is moving
- The hood is open
- The brake pedal or accelerator pedal is depressed when all the doors are closed
- The smart key is outside the vehicle when the brake pedal is depressed while the driver's door is open
- Rapid acceleration occurs
- · Vehicle skid occurs
- The wheel is stuck by an obstacle and cannot move
- The slope of the road exceeds the operational range
- The function is paused for more than 1 minute
- About 3 minutes and 50 seconds have past after Smart Parking function has started to operate
- · The steering wheel, gearshift, braking, and drive controls are not working properly
- ABS, TCS, or ESC system operates due to slippery road conditions
- The charging door is open
- During Remote Operation, Remote Parking operation
  - The brake pedal or accelerator pedal is depressed
  - The smart key is outside your vehicle when the brake pedal is depressed while the driver's door is open
  - The total travel distance of your vehicle has exceeded about 45 ft. (14 m) after Remote Operation function is operated
  - There is a problem with the smart key or the smart key battery is low
  - Theft Alarm System sounds
  - There are pedestrians, animals or objects at the front and rear of the vehicle at the same time
- During Smart Parking, Smart Exit operation
  - The driver opens the door with the seatbelt unfastened
  - Pedestrians, animals, or objects that are very close to the vehicle

# **RSPA** settings



### CAUTION

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

# Warning methods

You can set the following Warning methods for RSPA:

· Warning volume

For more information, refer to the 'Driver Assistance System Settings' section in this chapter.

### **RSPA Malfunction and Limitations**

#### RSPA malfunction

#### RSPA check



2C\_CheckRSPAInfo

When RSPA is not working properly, the 'Check Parking Assist' warning message appears on the infotainment system. If the message appears, stop using RSPA, and have your vehicle inspected by an authorized HYUNDAI dealer.

#### RSPA canceled



2C CheckRSPACancelledInfo

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

#### RSPA standby



2C CheckRSPAStandbyInfo

The 'Parking Assist Conditions Not Met' message appears in the following circumstances:

- When Parking/View [P] button has been pressed and held while RSPA is in standby.

  After a while, press and hold the Parking/View [P] button again to see if RSPA works.
- The smart key's battery is low. Check the battery and replace it if needed.
- When AWD mode is set. Switch to another mode to use RSPA.
- · When the vehicle is not in **READY** mode.

# Detecting sensors

RSPA uses the following sensors:

- · Wide-front view camera
- Wide-side view camera (below the side view mirror)
- · Wide-rear view camera
- · Front ultrasonic sensors
- · Front side ultrasonic sensors
- · Rear ultrasonic sensors
- · Rear side ultrasonic sensors

For more information, refer to the 'Sensor Information' section in this chapter.

#### RSPA limitations

When the detecting sensors cannot detect the surrounding, RSPA may not operate properly.

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

- · An object is attached to the steering wheel
- The vehicle is installed with a snow chain, spare tire or different size wheel
- Tire pressure is lower or higher than the standard tire pressure
- Your vehicle is loaded with cargo longer or wider than your vehicle or a trailer is connected to your vehicle
- There is a problem with the wheel alignment
- · Braking system components such as brake discs, calipers, etc., are modified

- · Your vehicle is leaned severely to one side
- Your vehicle is equipped with a trailer hitch
- The license plate is installed differently from the original location
- Your vehicle is overloaded or cargo is loaded to one side
- RSPA is operated when SNOW mode (Terrain mode) is set
- There is a person, animal or object above or below the ultrasonic sensor when RSPA is activated
- The parking space is curved or diagonal
- There is an obstacle such as a person, animal or object (trash can, bicycle, powered two-wheeler, shopping cart, narrow pillar, etc.) near the parking space
- There is a circular pillar or narrow pillar, or a pillar surrounded by objects such as fire extinguisher, etc., near the parking space
- The road surface is bumpy (curbstone, speed bump, etc.)
- The road is slippery
- The parking space is near a vehicle with higher ground clearance or big, such as a truck, etc.
- · The parking space is inclined
- The road surface of parking space with lines is wet due to snow, puddles, or there is a road marker inside the parking space
- The road surface of the parking space with lines is bumpy due to road cracks
- The parking line is too thin or thick
- · The parking line is partially erased or blurred
- The parking line is obscured by people, animals, or objects such as snow, boxes, etc.
- · There is heavy wind
- Operating RSPA on uneven roads, gravel roads, bushes, etc.

RSPA may not operate properly under the following circumstances:

#### · Parking on inclines



2C\_RSPAParkingInclineInfo

Park or exit your vehicle manually on inclines.

#### · Parking on uneven road



2C\_RSPAParkingUnevenRoadInfo

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

# · Parking near a truck



2C\_RSPAParkingBehindTruckInfo

Do not use RSPA around vehicles with higher ground clearance, such as a bus, truck, etc. It may lead to an accident. Park or exit your vehicle manually.

# · Parking near a pillar



2C\_RSPAParkingNeerPillarInfo

RSPA performance may be reduced or collision with an obstacle may occur when there is a narrow object, circular pillar, square pillar, or a pillar surrounded by objects such as a fire extinguisher, etc., near the parking space. Park or exit your vehicle manually.

# · Parking next to a misaligned vehicle



2C\_RSPAParkingWithSideVehicleInfo

If RSPA is used when parking in a space next to misaligned vehicles, your vehicle may not be parked side by side.

However, if there is a parking line and it is detected properly, your vehicle parks side by side with the parking line.

# · Parking in a narrow space



For your safety, RSPA does not search for parking spaces at areas with narrow parking spaces that are narrower than the minimum space required for parking.

RSPA may not operate properly when parking in a narrow space. Always check for pedestrians, animals, objects while parking.

# · Leaving a parking space near a wall



2C ExitNearWall

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

# · Parking in abnormal spaces



2C\_AbnormalParkingSpace

RSPA does not work properly when the parking lines are not parallel. Do not park even though the parking space is recognized by the sensor.

### · Parking on inclines



2C\_InclinedParkingSpace

RSPA does not work properly on a inclined or curved road surface. Do not park even though the parking space is recognized by the sensor.

## · Parking in angled spaces



2C\_RSPAParkingDiagonalInfo

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

#### Parking in snow



2C\_RSPAParkingInSnowInfo

Snow may interfere with the operation of the ultrasonic sensor and wide view camera, or RSPA may cancel if the road is slippery while parking.



### **WARNING**

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

#### **Precautions**

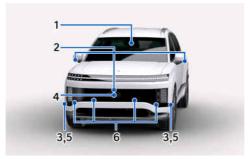
- If the continuous beeping warning of PDW sounds while RSPA is operating, it means the obstacle detected is close to your vehicle.
- Depending on brake operation, the stop lights may come on while the vehicle is moving.

• If the vehicle is remotely started that has been parked in cold weather for a long time, the operation of Remote Parking function may be delayed or canceled depending on vehicle condition.

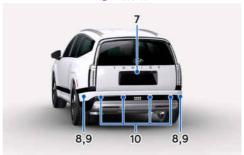
# **Sensor Information**

# **Driver Assistance System Sensors**

The driver assistance systems on your vehicle uses cameras and sensors to help detect potential hazards in the vicinity of your vehicle.



2C\_ADASSensor



2C\_ADASSensor\_1



2C\_IndoorCamera

- 1. Front view camera
- 2. Wide-front/side view camera
- 3. Front corner radar
- 4. Front radar
- 5. Front side ultrasonic sensors
- 6. Front ultrasonic sensors
- 7. Wide-rear view camera

- 8. Rear corner radar
- 9. Rear side ultrasonic sensors
- 10. Rear ultrasonic sensors
- 11. In-cabin camera



### CAUTION

- Never disassemble the sensor or sensor assembly, and never apply any impact on it.
- If the sensors have been replaced or repaired, have your vehicle inspected by an authorized HYUNDAI dealer.
- If there is impact on or near the sensors, driver assistance system may not operate properly even though a warning message does not appear on the instrument cluster. Have your vehicle inspected by an authorized HYUNDAI dealer.
- If the sensors or the surroundings are contaminated or damaged, driver assistance system may not work properly.
- Always keep the sensors in good condition to maintain optimal performance of driver assistance system.

#### **Sensor Limitations**

#### Front view camera

The front view camera detects a subject in front with the camera image. Take proper care of the front view camera as follows:

- Never install any accessories or stickers on the front windshield, or tint the front windshield.
- · Always keep the camera dry.
- Never place any reflective objects (for example, white paper, mirror) on the dashboard.
- Do not place objects or install structures near the front windshield. Windshield defrosting and defogging performance of the climate control system may decrease, which may cause driver assistance systems to not operate properly.

Front view camera detection performance may decrease or driver assistance system may not operate properly when:

- The temperature around the front view camera is high or low due to surrounding environment.
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or sticky foreign material (sticker, bug, etc.) on the glass.
- Moisture is not removed or frozen on the windshield.
- Washer fluid is sprayed continuously, or the wiper is on.
- You are driving in heavy rain or snow, or thick fog.
- The front view camera's field of view is obstructed by glare from the sun.
- Sunlight, streetlight or light from an oncoming vehicle is reflected on the wet road surface such as a puddle on the road.
- An object is placed on the dashboard.
- · Your vehicle is being towed.
- The surrounding is very bright or very dark (nighttime, tunnel, etc.).

- The brightness changes suddenly, for example when entering or exiting a tunnel.
- The brightness outside is low, and the headlights are not on or are not bright.
- A front vehicle, motorcyclist, pedestrian, or cyclist is partially visible.
- The vehicle or powered two-wheeler in front has no tail lights, tail lights are located unusually, etc.
- In low light conditions, the tail lamps of the front vehicle are turned off or not bright.
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visible, etc.
- The front vehicle's or powered two-wheeler's ground clearance is low or high.
- · A vehicle, motorcyclist, pedestrian, or cyclist suddenly cuts in front.

### Radars

The radar uses electric waves to detect the surroundings. Take proper care of the radars as follows:

- Do not install a license plate frame or other objects such as bumper sticker, film, bumper guard, or bumper wrap near the radar.
- Always keep the radars and radar covers clean. Do not spray the radar or the surrounding area directly with high pressure water.
- The genuine bumper parts with radars have proven their performance. Replacing or painting may result in poor performance of driver assistance systems. When the parts need to be replaced or modified, make sure to use qualified products.
- Do not attach accessories, moldings, stickers, films, wrapping, etc., to the sensors and surrounding areas, or paint the bumper.
- Driver assistance system may not work properly if the bumper has been replaced, or the surroundings of the radar has been damaged or painted.
- If a trailer or hitch mounted carrier is attached, it may adversely affect the performance of the rear corner radar or driver assistance system may not operate.
- If there is impact on or near the radar, the sensors may be damaged or not be
  properly aligned near the radar. Even though a warning message does not appear on
  the instrument cluster, driver assistance system may not operate properly. Have your
  vehicle inspected by an authorized HYUNDAI dealer.
- If the radar have been replaced or repaired, have your vehicle inspected by an authorized HYUNDAI dealer.

Radar detection performance may decrease or driver assist system may not operate properly when:

- The bumper around the radar is impacted, damaged or the radar is out of position.
- The temperature around the radar is high or low.
- · Driving through a tunnel or iron bridge.
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.).
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- The radar is covered with snow, rain, dirt, etc.

- The bumper around the radar is covered with objects, such as a bumper sticker, bumper guard, bike rack, etc.
- The radar is blocked by other vehicles, walls or pillars.
- · A trailer or carrier is installed around the radar.
- A material is near that reflects very well on the radar, such as guardrail, nearby vehicle, etc.
- The vehicle in front is made of material that does not reflect on the front radar well.
- Driving on a highway ramp or driving through a tollbooth.

#### Ultrasonic sensors

The ultrasonic sensor uses ultrasonic waves to detect the surroundings. Take proper care of the ultrasonic sensors as follows:

- Never disassemble or strike the ultrasonic sensors components.
- Ultrasonic sensor malfunction may be due to foreign substance, such as snow or water on the sensor. Always keep the sensors clean and clean it with a soft cloth when contaminated.
- Do not press the surface of the ultrasonic sensor with strength, strike with a hard object, or scratch with a sharp object. The sensor may be damaged.
- Do not spray the ultrasonic sensors or their surrounding area directly with high pressure washer.
- If the bumper height or ultrasonic sensor installation has been modified, or objects are attached in the ultrasonic sensor detection area, Parking Safety function may not operate properly.
- Do not apply objects, such as a bumper sticker or a bumper guard, near the ultrasonic sensors or apply paint to the bumper.

Ultrasonic sensor detection performance may decrease or driver assistance system may not operate properly when:

- Sensor is covered with foreign substance, such as snow or water (the function operates properly when such substance is removed).
- · The weather is extremely hot or cold.
- The ultrasonic sensors or sensor assembly is disassembled.
- The surface of the sensor is pressed hard or hit with a hard object.
- The surface of the sensor is scratched with a sharp object.
- The sensors or its surrounding area is directly sprayed with high pressure washer.
- Objects generating ultrasonic waves are near your vehicle.
- A wireless transmission device operates near the ultrasonic sensors.

#### Wide view cameras

The wide view camera detects or shows the surroundings with the camera image. Take proper care of the wide view camera as follows:

 Always keep the camera lens clean. If the lens is covered with foreign material, it may adversely affect camera performance and Rear View Monitor or Surround View Monitor may not operate properly.

- When cleaning the wide view cameras, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone, etc.). This may damage the camera lens.
- Do not spray the wide view cameras or their surrounding area directly with high pressure washer.
- · Do not apply objects, such as a bumper sticker or a bumper guard, near the wide view cameras or apply paint to the bumper.
- Do not disassemble the wide view cameras or sensor assembly.
- · Do not impact the wide view cameras. If the camera is out of position due to impact, it may not operate properly. If the wide view camera is damaged, have your vehicle inspected by an authorized HYUNDAI dealer.

#### In-cabin camera

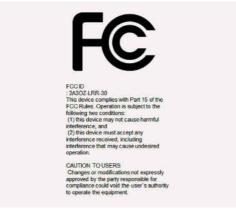
The in-cabin camera is mounted to the steering wheel. Take proper care of the in-cabin camera as follows:

- Do not impact the surface of the camera or around the camera. Driver assistance system may not operate properly.
- · Do not place anything on the camera or in front of the camera while driving. The in-cabin camera may not operate properly.
- · When cleaning the camera, wipe with a soft and clean cloth to prevent damages on the surface of the camera lens. In addition, you should not use sharp tools near the camera, or use chemicals to clean the camera.
- Always keep the camera and around the area of the in-cabin camera clean and dry.
- · Do not apply foreign objects, such as a sticker, around the infrared LED located near the camera.

# **Declaration Of Conformity**

#### **Front Radar**

The radio frequency components (Front Radar) complies:



2C FrontRadarCertification

# Front Corner Radar (if equipped)/Rear Corner Radar

The radio frequency components (Rear Corner Radar) complies:



2C FrontRearSideRadarCertification

# 8. Emergency Situations

This chapter explains how to safely deal with emergency situations while driving.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to vour vehicle.
- The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference auide.

# **Hazard Warning Flasher**



2C HazardWarningLamp

The hazard warning flashers warn other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle. It should be used whenever making emergency repairs or when stopped near the edge of a roadway.

To turn on or off the hazard warning flasher, press the hazard warning flasher button with the Start/Stop button in any position.

- All turn signal lights flash simultaneously.
- The hazard warning flasher operates whether your vehicle is running or not.
- The turn signals do not work when the hazard flasher is on.

# In Case Of Vehicle Malfunction

# If the Vehicle Stalls While Driving

- Reduce the speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- Turn on your hazard warning flasher.
- Try to start the vehicle again. If your vehicle does not start, contact an authorized HYUNDAI dealer or seek other qualified assistance.

## If the Vehicle Stalls at a Crossroad or Crossing

If the vehicle stalls at a crossroad or intersection, if safe to do so, shift the gear to N (Neutral) and then push the vehicle to a safe location.

#### If the Vehicle Does not Start

- Be sure to shift the gear to N (Neutral) or P (Park). The vehicle starts only when the gear is in N (Neutral) or P (Park).
- Turn on the interior light. If the light dims or goes out when you operate the starter, the battery is drained.

For more information, refer to the instructions in 'Jump Starting' provided in this chapter.

If the vehicle still does not start, contact an authorized HYUNDAI dealer for assistance.

#### NOTICE

Do not push or pull the vehicle to start it. This could cause damage to your vehicle.

# **Jump Starting**

Jump starting can be dangerous if done incorrectly. Follow the jump starting procedure in this section to avoid serious injury or damage to your vehicle. If in doubt about how to properly jump start your vehicle, have a service technician or towing service do it for you. To prevent SERIOUS INJURY or DEATH to you or bystanders, always follow these precautions when working near or handling the battery:

• Always read and follow instructions carefully when handling a battery.



• Wear eye protection designed to protect the eyes from acid splashes.



• Keep all flames, sparks, or smoking materials away from the battery.



 Hydrogen is always present in battery cells, is highly combustible, and may explode if ignited.



· Keep batteries out of reach of children.



Batteries contain sulfuric acid that is highly corrosive. Do not allow acid to contact your
eyes, skin, or clothing. If acid gets into your eyes, flush your eyes with clean water
for at least 15 minutes and get immediate medical attention. If acid gets on your skin,
thoroughly wash the area. If you feel pain or a burning sensation, get medical attention
immediately.



- When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak. Lift with a battery carrier or with your hands on opposite corners.
- Do not attempt to jump start your vehicle if your battery is frozen.

- NEVER attempt to recharge the battery when the vehicle's battery cables are connected to the battery.
- The electrical ignition system works with high voltage.
   NEVER touch these components with the vehicle running or when the Start/Stop button is in the ON position.
- The electrical ignition system works with high voltage. NEVER touch these components when Start/Stop button in the POWER ON or DRVIE READY position.
- Only use a 12 V power supply (battery or jumper system) to jump start your vehicle.

### NOTICE

To prevent damage to your vehicle:

• Do not attempt to jump start your vehicle by push-starting.

# Jump starting procedure

- 1. Position the vehicles close enough that the jumper cables can reach. Do not allow the vehicles to touch.
- 2. Turn off all electrical devices such as radios, lights, air conditioning, etc. Put the vehicles in P (Park) and apply the parking brake. Turn both vehicles OFF.
- 3. Open the hood.
- 4. Remove the motor compartment battery service cover.



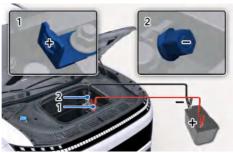
### CAUTION

Before jump starting, make sure to correctly identify the positive + and negative - terminals to avoid reverse polarity connections.

#### NOTICE

Avoid fans or any moving parts in the motor compartment at all times, even when the vehicles are turned off.

5. First connect one jumper cable to the red, positive + battery terminal of your vehicle. Connect the other end of the jumper cable to the red, positive + battery/jumper terminal of the assisting vehicle.



2C\_JumpStartOverview

- Positive + battery terminal
- 2. Negative battery terminal
- 6. Connect the second jumper cable to the black, negative battery/jumper terminal of the assisting vehicle. Connect the other end of the second jumper cable to the negative - battery terminal of your vehicle.



# MARNING

- Do not allow the jumper cables to contact anything except the correct battery or jumper terminals or the correct ground. Do not lean over the battery when making connections.
- Do not connect the jumper cable to the negative jumper terminal of the discharged battery. A spark could cause the battery to explode and lead to a personal injury or vehicle damage.
- 7. Start the assisting vehicle and let it run for a few minutes. Then start your vehicle. Keep your vehicle driving to make sure your battery receives enough charge to be able to start on its own after the vehicle is shut off.

#### INFORMATION

- A completely discharged battery may require as long as 60 minutes runtime to fully recharge. If the vehicle is run for less, the vehicle may not restart.
- · If your vehicle does not start after a few attempts, it probably requires service. Have your vehicle inspected by an authorized HYUNDAI dealer.
- 8. When the vehicle starts, first disconnect the jumper cable from the negative battery terminal of your vehicle and the black, negative - battery/jumper terminal of the assisting vehicle. Then, disconnect the second jumper cable from the red, positive + battery/jumper terminal of the assisting vehicle and the red, positive + battery terminal of your vehicle.



#### MARNING

While jump starting your vehicle, avoid the positive + and negative - cables to come in contact. A spark could cause personal injury.

#### NOTICE



An inappropriately disposed battery may be harmful to the environment and human health. Always dispose of a used battery according to your local law(s) or regulations.

# If You Have a Flat Tire While Driving

If a tire goes flat while you are driving, take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. When the vehicle has slowed to such a

speed that it is safe to do so, brake carefully and pull off the road. Drive off the road as far as possible and park on a firm, level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.

- When the vehicle is stopped, press the hazard warning flasher button, shift the gear to P (Park), apply the parking brake, and move the Start/Stop button to the OFF position.
- Have all passengers get out of the vehicle. Make sure they all get out on the side of the vehicle that is away from traffic.
- When replacing a flat tire, follow the instructions provided later in this chapter.



# MARNING

Do not apply the brakes immediately or attempt to pull off the road because this may cause loss of vehicle control resulting in a collision.

# **Tire Pressure Monitoring System (TPMS)**



2C TPMSInfo

- 1. Low Tire Pressure Position Telltale and Tire Pressure Telltale (shown on the cluster display)
- 2. Low Tire Pressure Telltale/TPMS Malfunction Indicator

# Check tire pressure



2C\_TireLowPressureInfo

- You can check the tire pressure in the utility view mode in the cluster display. For more information, refer to the 'Cluster Settings' section in chapter 4.
- You can check the tire pressure in the utility view mode in the cluster display.

For more information, refer to the 'Cluster display view modes' section in chapter 4 of the complete Owner's Manual.

- Tire pressure appears after a few minutes of driving. If the tire pressure does not appear when the vehicle is stopped, the message, 'Drive to display' appears.
- The displayed tire pressure values may differ from those measured with a tire pressure gauge.
- You can change the tire pressure unit from the Settings menu in the infotainment system. Select Setup > General > Units> Tire Pressure Unit > psi, kpa, bar.

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INFORMATION		

The infotainment system may change after software updates. For more information, refer to the user's manual provided in the infotainment system and the quick reference guide.

# Tire pressure monitoring system



# MARNING.

- Over-inflation or under-inflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure that may cause loss of vehicle control resulting in an collision.
  - Under-inflation also reduces energy efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.
- Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)
- · As an added safety feature, your vehicle has been equipped with a TPMS that illuminates a Low Tire Pressure Telltale when one or more of your tires is significantly under-inflated. Accordingly, when the Low Tire Pressure Telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the Low Tire Pressure Telltale. When the system detects a malfunction, the telltale flashes for approximately one minute and then remains continuously illuminated. This sequence continues upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly.

- · Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.
- Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS Low Tire Pressure Telltale.

#### NOTICE

Have the system inspected by an authorized HYUNDAI dealer if:

- The Low Tire Pressure Telltale/TPMS Malfunction Indicator does not illuminate for 3 seconds when the Start/Stop button is moved to the POWER ON or DRIVE READY position.
- The TPMS Malfunction Indicator remains illuminated after blinking for about 1 minute.
- The Low Tire Pressure Position Telltale remains illuminated.

### Low Tire Pressure Position and Tire Pressure Telltale



2C\_TPMSWaringLampOverView\_2



2C\_TireLowPressureWarning

TPMS is not a substitute for manually checking the tire pressure with a tire gauge. Changes in temperature affect tire pressure. For proper tire inflation and tire pressure measurement procedure, refer to the 'Check tire inflation pressure' section in the chapter 9.

When the tire pressure monitoring system warning indicators illuminate and a warning message appears on the cluster display, one or more of your tires are significantly underinflated. The Low Tire Pressure Position Telltale indicates which tire is significantly underinflated by illuminating the corresponding parking light. If either telltale illuminates, immediately reduce the vehicle speed, avoid hard cornering and anticipate increased stopping distances. Stop and check your tires as soon as possible. Inflate the tires to the proper pressure as indicated on the vehicle's placard or tire inflation pressure label located on the driver's side center pillar outer panel.

If you cannot reach a service station or the tire cannot hold the newly added air, replace the low pressure tire with the spare tire.

The Low Tire Pressure Telltale remains on and the TPMS Malfunction Indicator may blink for one minute and then remain illuminated (when the vehicle is driven about 10 minutes at the speed above 15.5 mph (25 km/h)) until you have the low pressure tire repaired and replaced on the vehicle.



- In winter or cold weather, the Low Tire Pressure Telltale may be illuminated if the tire
  pressure was adjusted to the recommended tire inflation pressure in warm weather. It
  does not mean your TPMS is malfunctioning because the decreased temperature leads
  to a proportional lowering of tire pressure.
- When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is greatly higher or lower, check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.
- Significantly low tire pressure makes the vehicle unstable and may contribute to loss of vehicle control and increased braking distances.
- Continued driving on low pressure tires may cause the tires to overheat and fail.

# Low Tire Pressure Warning Light/TPMS Malfunction Indicator



The TPMS Malfunction (!) Indicator illuminates after it blinks for about one minute when there is a problem with the Tire Pressure Monitoring System. Have the system inspected by an authorized HYUNDAI dealer as soon as possible.

### NOTICE

- If there is a malfunction with the TPMS, the individual tire pressures on the cluster display are not be available. Have the system inspected by an authorized HYUNDAI dealer as soon as possible.
- The TPMS Malfunction Indicator may illuminate after blinking for one minute if the vehicle is near electric power supply cables or radio transmitters such as police stations, government and public offices, broadcasting stations, military installations, airports, transmitting towers, etc.
- Additionally, the TPMS Malfunction Indicator may illuminate if snow chains are used or
  if electronic devices such as computers, chargers, remote starters, navigation, etc. are
  near the vehicle. This may interfere with normal operation of the TPMS.

# Changing a tire with TPMS

If you have a flat tire, the Low Tire Pressure and Position Telltales come on. Have the flat tire repaired by an authorized HYUNDAI dealer as soon as possible or replace the flat tire with the spare tire.

- The TPMS cannot alert you to severe and sudden tire damage caused by external factors such as nails or road debris.
- If you feel any vehicle instability, immediately take your foot off the accelerator pedal, apply the brakes gradually with light force, and slowly move to a safe position off the road.
- Tampering with, modifying, or disabling the TPMS components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions and may void the warranty.

#### NOTICE

- Do not use a puncture-repair kit not approved by HYUNDAI. Tire sealant not approved by HYUNDAI or the equivalent sealant specified for your vehicle may damage the tire pressure sensor.
- The spare tire (if equipped) does not come with a tire pressure monitoring sensor.
   When the low pressure tire or the flat tire is replaced with the spare tire, the Low Tire
   Pressure Telltale remains on. Also, the TPMS Malfunction Indicator illuminates after
   blinking for one minute if the vehicle is driven at the speed above 15.5 mph (25 km/h)
   for about 10 minutes.
- Once the original wheel equipped with a tire pressure monitoring sensor is reinflated
  to the recommended pressure and reinstalled on the vehicle, the Low Tire Pressure
  Telltale and TPMS Malfunction Indicator goes off within a few minutes of driving.
   If the indicators do not turn off after a few minutes, visit an authorized HYUNDAI dealer.
- Each wheel is equipped with a tire pressure sensor mounted inside the tire behind
  the valve stem (except for the spare tire). You must use TPMS specific wheels. It is
  recommended that you always have your tires serviced by an authorized HYUNDAI
  dealer.
- You may not be able to identify a tire with low pressure by simply looking at it. Always
  use a good quality tire pressure gauge to measure. Note that a tire that is hot (from
  being driven) has a higher pressure measurement than a tire that is cold.
  - Allow the tire to cool before measuring the inflation pressure. Always make sure the tire is cold before inflating to the recommended pressure.
  - A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mi. (1.6 km) in that 3 hour period.

# If You Have a Flat Tire (with Tire Mobility Kit)



- Compressor
- 2. Sealant bottle

With the Tire Mobility Kit you stay mobile even after experiencing a tire puncture.

The compressor and sealing compound system effectively and comfortably seals most punctures in a passenger car tire caused by nails or similar objects and reinflates the tire.

After you are ensure that the tire is properly sealed you can drive cautiously on the tire (distance up to 120 mi. (200 km)) at a maximum speed of 50 mph (80 km/h) in order to reach a service station or tire dealer for tire replacement.

It is possible that some tires, especially with larger punctures or damage to the sidewall, cannot be sealed completely.

Air pressure loss in the tire may adversely affect tire performance.

For this reason, you should avoid abrupt steering or other driving maneuvers, especially if the vehicle is heavily loaded or if a trailer is in use.

The Tire Mobility Kit is not designed or intended as a permanent tire repair method and is to be used for one tire only.

For safe operation, carefully read and follow the instructions in this manual before use. The Tire Mobility Kit is a temporary fix to the tire, have the tire replaced by an authorized HYUNDAI dealer as soon as possible.



#### WARNING

- Do not use the Tire Mobility Kit to repair punctures in the tire walls. This can result in a crash due to tire failure.
- Have your tire repaired as soon as possible. The tire may lose air pressure at any time after inflating with the Tire Mobility Kit.



### CAUTION

When two or more tires are flat, do not use the Tire Mobility Kit because the sealant provided with the Tire Mobility Kit must be used for only one flat tire.

# Notes on the safe use of the Tire Mobility Kit

- · Park your vehicle at the side of the road so that you can work with the Tire Mobility Kit away from moving traffic.
- To be sure your vehicle does not move, even when you are on level ground, always apply your parking brake.
- Only use the Tire Mobility Kit for sealing/inflation passenger car tires. Only punctured areas located within the tread region of the tire can be sealed using the tire mobility kit.
- Do not use on motorcycles, bicycles or any other type of tires.
- When the tire and wheel are damaged, do not use Tire Mobility Kit.
- Use of the Tire Mobility Kit may not be effective for tire damage larger than about 0.16 in (4 mm).
- Contact an authorized HYUNDAI dealer if the tire cannot be made roadworthy with the Tire Mobility Kit.
- Do not use the Tire Mobility Kit if a tire is severely damaged by driving run flat or with insufficient air pressure.
- Only punctured areas located within the tread region of the tire can be sealed using the Tire Mobility Kit.
- Do not remove any foreign objects such as nails or screws that have penetrated the tire.
- Provided the vehicle is outdoors, leave the vehicle running. Otherwise operating the compressor may eventually drain the car battery.
- · Never leave the Tire Mobility Kit unattended while it is being used.
- · Do not leave the compressor running for more than 10 minutes at a time or it may overheat.
- Do not use the Tire Mobility Kit if the ambient temperature is below -22 °F (-30 °C).
- In case of skin contact with the sealant, wash the area thoroughly with plenty of water. If the irritation persists, seek medical attention.
- In case of eye contact with the sealant, flush your eyes for at least 15 minutes. If the irritation persists, seek medical attention.
- In case of swallowing the sealant, rinse the mouth and drink plenty of water. However, never give anything to an unconscious person and seek medical attention immediately.
- Long time exposure to the sealant may cause damage to bodily tissue such as kidney, etc.

# Components of the Tire Mobility Kit



1C\_TMKPartsOverview

- 1. Connectors and cable for terminal connection
- 2. ON/OFF switch
- 3. Compressor
- 4. Pressure gauge for displaying the tire inflation pressure
- 5. Button for reducing the tire inflation pressure
- 6. Speed restriction label
- 7. Sealant bottle
- 8. Filling hose from sealant bottle to wheel
- 9. Filling hose



# MARNING.

- Do not use the tire sealant after the sealant has expired (the expiration date is pasted on the sealant container). This can increase the risk of tire failure.
- Sealant
  - Keep out of reach of children.
  - Avoid contact with eyes.
  - Do not swallow.

## Using the Tire Mobility Kit when a tire is flat



## CAUTION

Detach the speed restriction label from the sealant bottle, and place it in a highly visible place inside the vehicle such as on the steering wheel to remind the driver not to drive too fast.



- If only the tire pressure needs to be adjusted, refer to the 'How to adjust tire pressure' section in this chapter.
- Before using the Tire Mobility Kit, be fully aware of the explanation on the sealant.

Strictly follow the specified sequence, otherwise the sealant may escape under high pressure.

1. Shake the sealant bottle.



2. Connect the filling hose on the compressor to the sealant bottle. Keep the sealant bottle upright so the filling hose is heading upwards.



3. Unscrew the valve cap from the valve of the defective wheel and screw the filling hose of the sealant bottle onto the tire valve.



## **CAUTION**

Securely install the sealant filling hose to the valve. If not, sealant may flow backward, possibly clogging the filling hose.

- 4. Ensure that the compressor is switched OFF.
- 5. Open the hood.
- 6. Remove the battery service cover.



7. Connect the cables to the RED + jumper terminal in the motor compartment fuse panel and the BLACK - jumper terminal in numerical order.



- 1. RED cable: + jumper terminal
- 2. BLACK cable: jumper terminal



## **CAUTION**

- Tire Mobility Kit cable connection can be dangerous if done incorrectly. Therefore, to avoid harm to yourself or damage to the Tire Mobility Kit or battery, follow the Tire Mobility Kit cable connection procedures.
- When disconnecting the Tire Mobility Kit cables, disconnect the BLACK cable first from the jumper terminal and then disconnect the RED + cable.
- Be careful for battery sparks when connecting or disconnecting the battery cables.
- 8. With the vehicle ON, switch on the compressor and let it run for about 5-7 minutes to fill the sealant up to proper pressure. The inflation pressure of the tire after filling is unimportant and can be checked/corrected later.

Be careful not to overinflate the tire and stay away from the tire when filling it.



#### WARNING

Do not attempt to drive your vehicle if the tire pressure is below 29 psi (200 kPa). This could result in a crash due to sudden tire failure.

- **9.** Switch off the compressor.
- 10. Detach the hoses from the sealant bottle connector and from the tire valve. Return the Tire Mobility Kit to its storage location in the vehicle.

11. Immediately drive about 4-6 mi. (7-10 km or about 10 minutes) to evenly distribute the sealant in the tire.



2C TMKPrecedure 5

Do not exceed a speed of 50 mph (80 km/h). If possible, do not fall below a speed of 12 mph (20 km/h).

While driving, if you experience any unusual vibration, ride disturbance or noise, reduce your speed and drive with caution until you can safely pull off of the side of the road.

Call for road side service or towing.

- 12. After driving about 4-6 mi. (7-10 km or about 10 minutes), stop at a safety location.
- 13. Connect the filling hose of the compressor directly to the tire valve. Adjust the tire inflation pressure to the recommended tire inflation.



#### CAUTION

- If the tire inflation pressure is not maintained, drive the vehicle a second time, refer to step 11. Then repeat steps 12 to 13.
- Use of the Tire Mobility Kit may not be effective for tire damage larger than about 0.16 in. (4 mm).
- · Contact an authorized HYUNDAI dealer if the tire cannot be made roadworthy with the Tire Mobility Kit.
- The sealant on the tire pressure sensor and wheel should be removed when you replace the tire with a new one and inspect the tire pressure sensors. Have this done at an authorized HYUNDAI dealer.

## How to adjust tire pressure

- 1. Park your vehicle in a safe location.
- 2. Connect the filling hose of the compressor directly to the tire valve.



## CAUTION

Do not use the sealant when the tire pressure only needs to be adjusted.

- 3. Remove the motor compartment fuse box cover.
  - Connect cables to the jumper terminals in numerical order.
- 4. Adjust the tire inflation pressure to the recommended tire inflation.
  - With the vehicle running, proceed as follows:
  - To increase the inflation pressure: Switch on the compressor. To check the current inflation pressure setting, briefly switch off the compressor.
  - To reduce the inflation pressure: Press the button on the compressor.



#### WARNING

The tire inflation pressure must be inflated to the proper pressure. For more information, refer to the 'Tires and Wheels' section in chapter 10. If it is not inflated, do not continue to drive.

The tire inflation pressure must be inflated to the proper pressure. For more information. refer to the 'Tires and Wheels' section in chapter 10 of the complete Owner's Manual. If it is not inflated, do not continue to drive.

Call for road side service or towing.

#### NOTICE

Do not let the compressor run for more than 10 minutes, otherwise the device may overheat and may be damaged.

#### INFORMATION

- The pressure gauge may show higher than actual reading when the compressor is running. To get an accurate tire reading, the compressor needs to be turned off.
- When reinstalling the repaired or replaced tire and wheel on the vehicle, tighten the wheel nut to 116-130 lbf·ft (16-18 kgf·m).

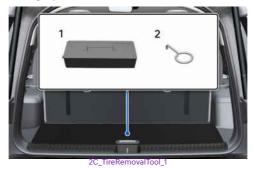
#### Wheel and Tire Installation

#### tif equipped

When removing and installing wheels and tires, use the tool for removing the wheel cover inside the tool case to remove the wheel cover.

The remover insertion hole is located at the top or edge of the wheel cover.

## Dedicated remover storage position



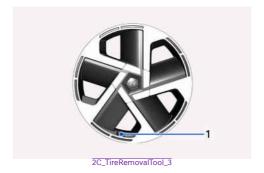
- 1. Tool case
- 2. Dedicated removal tool

## How to remove the wheel cover using a dedicated removal tool



- 1. Make sure to place the wheel cover into the designated position when replacing the
- 2. The designated position of the wheel cover depends on the shape of the wheel.
- 3. Align the valve stem hole in the wheel cover with the emblem of the wheel cover before installing.

wheel cover.



## 1. Valve stem

## **Towing**

## **Towing Service**

#### Flatbed Towing



2C\_TowingGood\_1

#### Wheel lift Towing



2C\_TowingGood\_2



2C\_TowingTwoWheelDrive

#### 1. Dollies

If towing is necessary, contact an authorized HYUNDAI dealer or a commercial tow-truck service.

AWD vehicles must be towed with a wheel lift and dollies or flatbed with all the wheels off the ground.

2WD vehicles can be towed with the front wheels on the ground (without dollies) and the rear wheels off the ground.

The use of wheel dollies or flatbed is recommended. If any of the loaded wheels or suspension components are damaged or the vehicle is towed with the front wheels on the ground, use a towing dolly under the front wheels.

When towing your vehicle without wheel dollies:

- 1. Release the parking brake before turning off the vehicle.
- 2. Place the Start/Stop button to the OFF position.
- 3. Change the gear to N (Neutral) while depressing the brake pedal.
- 4. Press the Start/Stop button to the POWER ON position.

# Precautions when moving a short distance using towing hook and so on before towing a vehicle

Move short distances within 33 ft. (10 m) at a speed of 3 mph (5 km/h) or less only when loading on a tow truck or if the vehicle needs to be repositioned.

At this time, the gear must be in the N (Neutral) position and the parking brake must be released. If it is impossible to operate the reducer gear and parking brake, move the vehicle by using dollies, tire skate, etc with all wheel lifted.



#### CAUTION

If your vehicle is equipped with a rollover sensor, press the Start/Stop button in the OFF or POWER ON position when the vehicle is being towed. The side impact and curtain airbag may deploy if the sensor detects the situation as a rollover.

#### NOTICE

To prevent damage when towing:

- Do not lift using the trailer hitch or body and chassis parts.
- Do not tow the vehicle with the rear wheels on the ground.



2C\_TowingBad\_1

 Do not tow vehicles with sling-type equipment. Only use wheel lift or flatbed equipment.



2C TowingBad 2

 Always shift the gear to N (Neutral) to prevent damage to the reducer gear before towing.

## If the Electric Vehicle Needs Towing

If towing is required, lift all wheels to tow. Towing with the wheels on the ground may damage the vehicle's motor components.



When a vehicle fire occurs due to the battery, there is a risk of a second fire. Contact the fire department when towing the vehicle.

## **Countermeasures For Accidents Or Fire**

When an accident occurs while driving the vehicle, turn on the hazard warning flasher, move the vehicle to a safe place, and do not let other people approach the site.



#### WARNING

When an accident occurs, and the high voltage battery is damaged, harmful gas and electrolytes may leak.

- · Be careful not to touch the leaked liquid.
- When you suspect leakage of inflammable gas and other harmful gases, open the windows and immediately evacuate to a safe location.
- If any leaked fluid comes in contact with your eyes or skin, immediately clean the affected area thoroughly with tap water or saline solution and have doctors inspect it as soon as possible.

#### If the Electric Vehicle Catches Fire

If a fire occurs, evacuate to a safe place and do not let other people approach the site.

· Contact the fire department, report an electric vehicle fire, and then follow its instructions.



#### 🗥 WARNING

If the lower part of the vehicle where the high voltage battery is located catches fire, large amount of water must be supplied continuously for a long time to completely extinguish the fire. It is hard to extinguish the fire without sufficient water and appropriate fire extinguishers. If you approach the vehicle carelessly, it may cause accidents, such as electric shock, and result in serious injury.



#### CAUTION

If a fire occurs, evacuate to a safe place and wait until the firefighters arrive.

## If the Electric Vehicle is Submerged

If the electric vehicle is submerged while driving, immediately turn off the vehicle and evacuate to a safe place with your key. Contact the emergency rescue service such as a fire department, or an authorized HYUNDAI dealer.



#### 🗥 WARNING

Never touch the submerged electric vehicle. This may lead to an accident such as an electric shock or fire.

#### **Other Precautions for Electric Vehicle Accidents**



## **CAUTION**

- · Be extremely cautious for electricity safety. An electric shock accident may occur due to a short circuit in high voltage power.
- When you paint or apply heat treatment to the vehicle as a result of an accident, the performance of the high voltage battery can be reduced. If heat treatment is required, contact an authorized HYUNDAI dealer.
- · Use or install only genuine parts. Third-party parts or modified parts may damage the electric power system

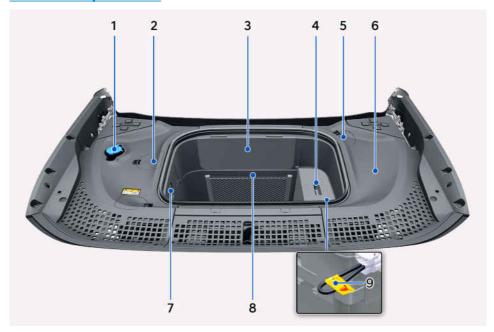
## 9. Maintenance

This chapter explains how to inspect and maintain your vehicle, to ensure safe driving.

#### INFORMATION

- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to your vehicle.

## **Motor Compartment**



The actual motor compartment in the vehicle may differ from the illustration.

- 1. Windshield washer fluid reservoir
- 2. Coolant reservoir
- 3. Cabin air filter
- 4. Battery (12 V)
- 5. Brake fluid reservoir
- 6. Fuse box
- 7. Front trunk emergency button
- 8. Front trunk
- 9. Emergency cable

## **Important Safety Precautions**

## Cooling fan operation precaution



#### MARNING



The electric motor for the cooling fan may continue to operate or start up when the vehicle is not running and can cause serious injury. Keep hands, clothing and tools away from the rotating fan blades of the cooling fan.

Always turn off the vehicle unless the vehicle has to be inspected with the vehicle on. The cooling fan may operate automatically if the negative - battery terminal is not disconnected.

## **Safety Precaution**



#### MARNING

Performing maintenance on the vehicle can be dangerous. If you lack sufficient knowledge, experience, or proper tools and equipment to do the work, have it done by an authorized HYUNDAI dealer. Before performing maintenance:

- Park your vehicle on level ground. Shift the vehicle to P (Park), apply the parking brake, and move the Start/Stop button to the OFF position.
- · Block the tires (front and back) to prevent the vehicle from moving. Remove loose clothing or jewelry that can become entangled in moving parts.
- · If you must run the vehicle during maintenance, do it in an outdoor area or in an area with plenty of ventilation.
- Keep flames, sparks, or smoking materials away from the battery parts.

#### **Maintenance Services**

Exercise the utmost care to prevent damage to your vehicle and injury to yourself whenever performing any maintenance or inspection procedures.

Have your vehicle maintained and repaired by an authorized HYUNDAI dealer. An authorized HYUNDAI dealer meets HYUNDAI's high service quality standards and receives technical support from HYUNDAI in order to provide you with a high level of service satisfaction.

#### **Guide to HYUNDAI Genuine Parts**

HYUNDAI Genuine Parts are the parts used by HYUNDAI Motor Company to manufacture vehicles. They are designed and tested for the optimum safety, performance, and reliability for our customers.





2C\_GenuineParts\_2

## Importance of using HYUNDAI Genuine Parts

HYUNDAI Genuine Parts are engineered and built to meet rigid manufacturing requirements. Damage caused by using imitation, counterfeit, or used salvage parts is not covered under the HYUNDAI New Vehicle Limited Warranty or any other HYUNDAI warranty.

In addition, any damage to or failure of HYUNDAI Genuine Parts caused by the installation or failure of an imitation, counterfeit or used salvage part are not covered by any HYUNDAI Warranty.



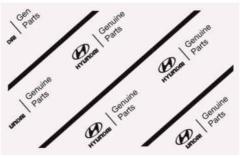
2C GenuineParts 3

## **Purchasing HYUNDAI Genuine Parts**

Look for the HYUNDAI Genuine Parts Logo on the package (see below).

HYUNDAI Genuine Parts exported to the U.S. are packaged with labels written only in English.

HYUNDAI Genuine Parts are only sold through authorized HYUNDAI Dealerships.



2C\_GenuineParts\_4

## **Owner's Responsibility**

Maintenance service and record retention are the owner's responsibility.

Retain documents that show proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service charts on the following pages. You need this information to establish your compliance with the servicing and maintenance requirements of your vehicle warranties.

Detailed warranty information is provided in your Owner's Handbook & Warranty Information booklet.

Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered.

#### **Owner Maintenance Precautions**

Inadequate, incomplete, or insufficient servicing may result in operational problems with your vehicle that could cause vehicle damage or a collision that results in serious injury or death.

Your vehicle must not be modified in any way. Such modifications may adversely affect the performance, safety, or durability of your vehicle and may, in addition, violate conditions of the limited warranties covering the vehicle.

#### NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For more information, read the separate Owner's Handbook & Warranty Information Booklet provided with the vehicle.

## **Owner Maintenance**

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized HYUNDAI dealer at the frequencies indicated to help ensure safe and dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your authorized HYUNDAI dealer as soon as possible.

These Owner maintenance vehicle checks are generally not covered by warranties and you may be charged for labor, parts, and lubricants used.

The electric control system in the vehicle may cause malfunction or other negative impact on the artificial heart and the artificial internal organs. Be sure to inquire the impact of the electric control system on the artificial organs from the medical product corporation.

#### **Owner Maintenance Schedule**

## When you stop for charging:

- Check the coolant level in the coolant reservoir.
- Check the windshield washer fluid level.
- Check for low or under-inflated tires.

## While operating your vehicle:

- Check for vibrations in the steering wheel. Notice if there is any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or "pulls" to one side when traveling on a smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel, or "hard-to-push" brake pedal.
- If any slipping or changes in the operation of your gear shift occurs, check the shift gear fluid level.
- · Check the shift gear P (Park) function.
- Check the parking brake.
- Check for fluid leaks under your vehicle (water dripping from the air conditioning system during or after use is normal).

## At least monthly:

- Check the coolant level in the coolant reservoir.
- Check the operation of all exterior lights, including the headlights, brake lights, turn signals, and hazard warning flashers.
- Check the inflation pressures of all tires including the spare for tires that are worn, show uneven wear, or are damaged.
- Check for loose wheel nuts.



Be careful when checking your coolant level when the motor compartment is hot. This may result in coolant being blown out of the opening and cause serious burns and other injuries.

## At least twice a year:

- Check the radiator, heater, and air conditioning hoses for leaks or damage.
- Check the windshield washer spray and wiper operation. Clean the wiper blades with a clean cloth dampened with washer fluid.
- Check the headlight alignment.
- Check the seat belts for wear and function.

## At least once a year:

- Clean the body and door drain holes.
- Lubricate the door hinges and hood hinges.
- Lubricate the door, hood locks, and latches.
- Lubricate the door rubber weather strips.
- Check the air conditioning system.
- Inspect and lubricate the shift gear linkage and controls.
- Clean the battery and terminals.
- Check the brake fluid level.

## **Scheduled Maintenance Services**

Follow the normal maintenance schedule if the vehicle is not operated under severe usage conditions.

If your vehicle is operated under severe usage conditions, you should inspect, replace or refill more frequently than the normal maintenance schedule.

For more information on severe usage conditions, refer to the 'Maintenance Under Severe Usage and Low Mileage Conditions' section in this chapter.

#### INFORMATION

After driving more than 10 years or 100,000 mi., use severe maintenance schedule.

#### **Normal Maintenance Schedule**

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

	Months	12	24	36	48	60	72	84	96	108	120	132	144	156
MAINTENANCE INTERVALS	Miles×1,000	8	16	24	32	40	48	56	64	72	80	88	96	104
	Km×1,000	13	26	39	52	65	78	91	104	117	130	143	156	169
MAINTENA	NCE ITEM													
Cooling system														
12 V auxiliary battery condition						ı	I	I	1	I				
Brake lines, hoses, and connections														
Disc brakes and pads			ı	ı	ı						ı	ı	I	ı
Brake pedal														
Steering gear rack, linkage, and boots														
Air conditioning compressor, air conditioner refrigerant and performance														
Drive shafts and boots			ı		ı		ı		ı		ı		ı	
Replace Climate Control Air Filter (For Evaporator and Blower Unit)		ı	R	ı	R	ı	R	ı	R	ı	R	ı	R	I
Gear fluid					ı				ı				I	
Rotate Tires (Includes Tire Pressure and Tread Wear Inspection)		Rotate every 8,000 mi. (13,000 km) or 12 months												

	Months	12	24	36	48	60	72	84	96	108	120	132	144	156
MAINTENANCE INTERVALS	Miles×1,000	8	16	24	32	40	48	56	64	72	80	88	96	104
	Km×1,000	13	26	39	52	65	78	91	104	117	130	143	156	169
MAINTENANCE ITEM														
Coolant *1	Standard	At first, replace at 120,000 mi. (195,000 or 120 months. After that, replace ever 25,000 mi. (39,000 km) or 24 months					ery	,						
Brake fluid					Rep	lac		ery	48,	000	) mi		or 1: 3,00	

<sup>\*1:</sup> Consult an authorized HYUNDAI dealer, when replacing or adding coolant.

## EV Special Care

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

	Numbe	or dr	ivin	g dis	tan	ce, v	vhic	hev	er c	ome	s fir	st		
MAINTENANCE	Months		12	24	36	48	60	72	84	96	108	120	132	144
INTERVALS	Miles×1,000		8	16	24	32	40	48	56	64	72	80	88	96
	Km×1,000		13	26	39	52	65	78	91	104	117	130	143	156
MAINTENANCE ITEM														
High Voltage	Insulation resistance check		ı	ı	I	I	I	Ι	I	ı	-	-	ı	ı
Battery	Voltage deviation check		ı	ı	ı	ı	I	-	-	-	Ι	-	ı	ı
Cooling System	Air- cooled	Coolant amount check	ı	ı	ı	ı	I	I	I	I	I	I	I	ı
	Water cooling	Coolant amount check	ı	ı	ı	I	I	I	ı	ı	_	_	ı	ı
		EWP operation status check	I	I	I	I	I	I	I	I	I	I	ı	I
		3way valve operation check	I	I	ı	ı	ı	ı	ı	ı	I	I	ı	I
DTC	Fault code check (Full DTC scanning)		ı	ı	ı	ı	ı	ı	ı	ı	I	ı	ı	ı
Louise body	Battery lowe damage che		ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı
Lower body	High voltage cable damage check		ı	ı	ı	ı	ı	ı	ı	ı	1	1	ı	ı

## Maintenance Under Severe Usage and Low Mileage Conditions

I: Inspect and if necessary, adjust, correct, clean or replace

R: Replace

Maintenance item	Maintenance operation	Maintenance intervals	Driving condition		
Gear fluid	R	Replace every 80,000 mi. (120,000 km)	A, C, F, G		
Steering gear rack, linkage and boots	I	Inspect more frequently depending on the condition	A, B, C, D, E		
Suspension ball joints	I	Inspect more frequently depending on the condition	A, B, C, D, E		
Disc brakes and pads, calipers and rotors	I	Inspect more frequently depending on the condition	A, B, C, D, E, F, G, H, I		
Drive shaft and boots	I	Inspect more frequently depending on the condition	A, B, C, D, E, F, G, H		
Cabin air filter	R	Replace more frequently depending on the condition	A, C, E		

## Severe driving conditions

- A. Driving on rough, dusty, muddy, unpaved, graveled or salt spread roads
- B. Driving in areas using salt or other corrosive materials or in very cold weather
- C. Driving in heavy dust condition
- D. Driving in heavy traffic area with the ambient temperature higher than 90  $^{\circ}$ F (32  $^{\circ}$ C) while consuming more than 50  $^{\circ}$ 6 of electric energy.
- E. Driving on uphill, downhill, or mountain roads repeatedly
- F. Towing a trailer or using a camper, or driving with loads on the roof
- G. Driving as a patrol car, taxi, other commercial use or vehicle towing
- H. Frequently driving under high speed or rapid acceleration/deceleration
- I. Frequently driving in stop-and-go conditions

## **Vehicle Inspection And Maintenance**

#### Coolant

The high pressure cooling system has a reservoir filled with year-round antifreeze coolant. Check the antifreeze protection and coolant level at least once a year, before the winter season or before traveling to a colder climate.

## Checking the coolant level



Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

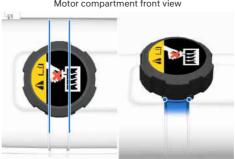
The coolant level should be filled between the MAX and the MIN marks on the side of the coolant reservoir when the parts in the motor compartment is cool.

If the coolant level is low, add enough distilled (deionized) water mixed with antifreeze to bring the level to the MAX mark. If frequent additions are required, have your vehicle inspected by an authorized HYUNDAI dealer for a cooling system inspection.

Never remove the battery system coolant cap or the drain plug while the radiator is hot. Hot coolant and steam may blow out under pressure, causing serious injury.



- Turn the motor system off and wait until it cools down. Use extreme care when removing the coolant cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.
- · Make sure the coolant cap is properly closed after refilling coolant. Otherwise, the motor compartment may be overheated while driving. Check if the coolant cap label is straight in front and the tiny protrusions inside the



Motor compartment front view

2C CheckCoolantCapLocked

#### INFORMATION

• Battery system: Inverter, HSG, LDC

coolant cap are securely interlocked.

• The coolant should be changed at the intervals specified in the maintenance schedule.

#### Recommended coolant

- · When adding coolant, use only deionized water, distilled water, or soft water for your vehicle and never mix hard water in the coolant filled at the factory.
- An incorrect coolant mixture may result in severe malfunction or damage.
- Do not use alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60 % antifreeze or less than 35 % antifreeze, which could reduce the effectiveness of the solution.

For mixing percentage, refer to the following table:

Ambient Temperature	Mixture Percentage (volume)								
Ambient Temperature	Antifreeze	Water							
5 °F (-15 °C)	35	65							
-13 °F (-25 °C)	40	60							
-31 °F (-35 °C)*1	50	50							
-49 °F (-45 °C)	60	40							

<sup>\*1:</sup> 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 -31 °F (-35 °C) and higher.

## Changing coolant

Have the coolant changed by an authorized HYUNDAI dealer according to the maintenance schedule at the beginning of this chapter.



## MARNING .

Do not use coolant or antifreeze in the washer fluid reservoir.

Coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control resulting in an accident.

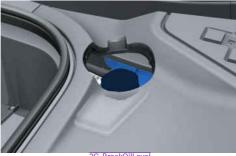
Coolant may also cause damage to paint and body trim.

#### NOTICE

To prevent damage to motor parts, put a thick towel around the coolant reservoir cap before refilling the coolant to prevent the coolant from overflowing into motor parts.

#### **Brake Fluid**

## Checking the brake fluid level



Check the fluid level in the reservoir periodically. The fluid level must be between the MAX and the MIN marks on the side of the reservoir.

Before removing the reservoir cap and adding brake fluid, clean the area around the reservoir cap thoroughly to prevent brake fluid contamination.

If the level is low, add the specified brake fluid to the MAX level. If the fluid level is excessively low or frequent additions are required, have the brake system inspected by an authorized HYUNDAI dealer.



#### WARNING

If brake fluid comes in contact with your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention.

#### NOTICE

- Do not allow brake fluid to contact the vehicle's body paint, because paint damage may occur.
- Never use brake fluid that has been exposed to open air for an extended time and dispose of it properly.
- Do not use the wrong type of brake fluid. A few drops of mineral based oil in your brake system may damage the brake system parts.
- Use only the brake fluid specified in the 'Recommended Lubricants and Capacities' section in chapter 10.
- Use only the brake fluid specified in the 'Recommended Lubricants and Capacities' section in chapter 10 of the complete Owner's Manual.

#### **Reduction Gear Fluid**

There is no reduction gear fluid level gauge in the vehicle. Check the reduction gear fluid every 40,000 mi (60,000 km) regularly. If the vehicle is driven under severe condition, check the maintenance under severe usage condition and consult an authorized HYUNDAI dealer.

#### Washer fluid

## Checking the washer fluid level



2C WasherFluid

Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water can be used during summer months if washer fluid is not available. However, use washer fluid with antifreeze in cold climates to prevent freezing.



To prevent serious injury or death:

- Do not use coolant or antifreeze in the washer fluid reservoir. Coolant can severely limit your visibility when sprayed on the windshield and may cause loss of vehicle control resulting in a collision.
- Do not allow sparks or flame to contact the washer fluid or the washer fluid reservoir.
   Washer fluid may contain alcohol and can be flammable.
- · Do not drink washer fluid and avoid contact with skin.

#### **Cabin Air Filter**

## Filter inspection

The cabin air filter must be replaced according to the maintenance schedule. If the vehicle operates in severely air-polluted cities or on dusty rough roads for a long time, have it inspected more frequently and replaced immediately. Replace the cabin air filter by following the procedure below and be careful to avoid damaging other components.

## Filter replacement

1. Open the hood and remove the cover by front trunk handle.



2C\_AirFilterReplacementProcedure\_1



2C\_AirFilterReplacementProcedure\_2

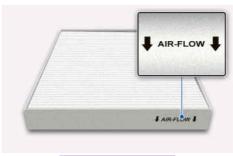
#### 2. Press and hold the lock on the left side of the cover.



2C\_AirFilterReplacementProcedure\_3

3. Replace the cabin air filter.

NOTICE



2C\_AirFilterReplacementCaution

Install a new cabin air filter with the arrow symbol ( $\downarrow$ ) facing down, to improve effectiveness.

4. Reassemble in the reverse order of disassembly.

#### **Wiper Blades**

Contamination of the windshield or wiper blades with foreign substances may reduce the effectiveness of the windshield wipers.

If the blades are not wiping properly, clean both the window and the blades with glass cleaner or mild detergent, and rinse thoroughly with clean water.

When the wipers no longer clean adequately, the blades may be worn or cracked. Replace the wipers with new ones.

#### NOTICE \_

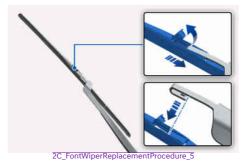
- To prevent damage to the wiper blades, arms, or other components, do not:
  - Use gasoline, kerosene, paint thinner, or other solvents on or near them.
  - Attempt to move the wipers manually.
- · To prevent damage:
  - Never use non-specified wiper blades.
  - Lift the wiper arms when in the top wiping position.
  - Always return the wiper arms to the windshield before driving.

## Front windshield wiper blade replacement

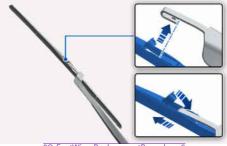


Within 20 seconds of turning off the vehicle, lift and hold the wiper lever up to the MIST position for about 2 seconds until the wipers move to the top wipe position.

- 1. Lift the wipers off the windshield.
- 2. Rotate wiper blade to access the clip.



3. While pushing the clip, pull down the wiper blade. Remove the wiper blade from the wiper arm.



2C FontWiperReplacementProcedure 6

- 4. Install a new wiper blade assembly in the reverse order of removal.
- 5. Gently put the wipers back down onto the windshield.
- 6. With the Start/Stop button in the POWER ON position, turn the wiper switch to any ON position to return the wipers to the bottom resting position.

#### NOTICE

- Avoid the wipers from touching the windshield when the wiper blade is disassembled to prevent windshield damage.
- The wiper may not operate for about 10 seconds if the wiper is operated without washer fluid or the blades are frozen to prevent damage to the motor.

## Rear window wiper blade replacement

- 1. Within 20 seconds after the vehicle is turned off, pull down the wiper lever to MIST position for over 2 seconds until the wiper moves down to the bottom middle part.
- 2. Raise the wiper arm.
- 3. Press the wiper blade slot. Then remove the wiper blade.



2C\_RearWiperReplacementProcedure\_1

4. Insert a new wiper blade into the wiper arm until an audible "click" sounds.



2C\_RearWiperReplacementProcedure\_2

5. If the replacement is complete, put down the wiper arm onto the rear windshield, and turn the Start/Stop button to POWER ON and operate the wipers to check the blade is installed correctly.

#### NOTICE

The rear wiper may not operate for about 10 seconds if the wiper is operated without washer fluid or the blades are frozen to prevent damage to the motor.

#### **Battery**



## WARNING

To prevent serious injury or death to you or bystanders when working near or handling the battery:

• Always read and follow instructions carefully when handling a battery.



• Wear eye protection designed to protect the eyes from acid splashes.



• Keep all flames, sparks, or smoking materials away from the battery.



 Hydrogen is always present in battery cells, is highly combustible, and may explode if ignited.



Keep batteries out of reach of children.



 Batteries contain sulfuric acid that is highly corrosive. Do not allow acid to contact your eyes, skin, or clothing. If acid gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If acid gets on your skin, thoroughly wash the area. If you feel pain or a burning sensation, get medical attention immediately.



 Lift a battery with a battery carrier or with your hands on opposite corners. When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak.

- Do not attempt to jump start your vehicle if your battery is frozen.
- Never attempt to recharge the battery when the vehicle's battery cables are connected to the battery.
- The electrical Start/Stop button works with high voltage. NEVER touch these components with the RFADY indicator ON or when the Start/Stop button is in the DRIVE READY position.



## MARNING

#### CALIFORNIA PROPOSITION 65 WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.

#### NOTICE

#### To prevent battery damage:

- Always fully charge the battery and store indoors when you do not plan to use the vehicle for a long time if the outside temperature is low enough to cause the battery to
- Always fully charge the battery to prevent battery case damage in low temperature areas.
- Prevent liquid from wetting the battery terminals. The performance of the battery may be degraded, and may cause injury. Be cautious when loading liquid in the liftgate.
- Do not tilt the battery.
- · If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

## For longer battery life



2C\_TakingCareOfBattery

- Keep the battery securely mounted.
- Keep the battery top clean and dry.
- · Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.

- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended period of time, disconnect the battery cables.

## Battery capacity label



2C\_BatteryCapacityLabel\_2

## Battery recharging

By battery charger

Your vehicle has a maintenance-free, calcium-based battery.

- If the battery becomes discharged over a short time (because, for example, the headlights or interior lights are left on while the vehicle is not used), recharge it by slow charging (trickle) for 10 hours.
- If the battery gradually discharges because of high electrical load while the vehicle is being used, recharge at 20-30 A for two hours.



To prevent the risk of serious injury or death from explosions or acid burns:

- Before performing maintenance or recharging the battery, turn off all accessories and stop the vehicle.
- Keep all flames, sparks, or smoking materials away from the battery.
- Always work outdoors or in an area with plenty of ventilation.
- Wear eye protection when checking the battery during charging. Do not contact the battery. This may result in serious injury.
- Remove the battery from the vehicle and place it in a well ventilated area.
- Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin boiling violently.
- Remove the negative battery cable first and install it last when the battery is disconnected. Disconnect the battery charger in the following order:
  - 1. Turn off the battery charger main switch.
  - 2. Unhook the negative clamp from the negative battery terminal.
  - 3. Unhook the positive clamp from the positive battery terminal.
- Do not open or remove the cap on top of the battery. This may cause leaks of internal electrolyte that could result in severe injury.

#### By jump starting

After a jump start from a good battery, drive the vehicle for 30 minutes or operate at idle for at least 60 minutes before it is shut off. The vehicle may not restart if you shut it off before the battery has a chance to adequately recharge. For more information on jump starting procedures, refer to the 'Jump Starting' section in chapter 8.

#### NOTICE



An inappropriately disposed battery may be harmful to the environment and human health. Dispose of the battery according to your local law(s) or regulations.

#### Reset items

The following items may need to be reset after the battery has been discharged or disconnected:

- Auto up/down window (refer to chapter 5)
- Power Liftgate (refer to chapter 5)
- Cluster Settings (refer to chapter 4)
- Cluster display view modes (refer to chapter 4 of the complete Owner's Manual)
- Automatic Climate Control System (refer to chapter 5)
- Integrated Memory System (refer to chapter 5 of the complete Owner's Manual)
- Clock (refer to chapter 5)

#### 863 Maintenance

- Clock (refer to chapter 5 of the complete Owner's Manual)
- Infotainment System (refer to the infotainment system manual)

#### Tires and wheels



#### WARNING

Tire failure may cause loss of vehicle control and result in a collision. To reduce risk of serious injury or death:

- Inspect your tires monthly for proper inflation as well as wear and damage.
- The recommended cold tire pressure for your vehicle can be found in this manual and on the tire label located on the driver's side center pillar. Always use a tire pressure gauge to measure tire pressure. Tires with too much or too little pressure wear unevenly causing poor handling.
- Check the pressure of the spare every time you check the pressure of the other tires on your vehicle.
- Replace tires that are worn, show uneven wear, or are damaged. Worn tires may cause loss of braking effectiveness, steering control, or traction.
- Always replace tires with the same size, type, construction, and tread pattern as each
  tire that was originally supplied with this vehicle. Using tires and wheels other than the
  recommended sizes may cause unusual handling characteristics, poor vehicle control,
  or negatively affect your vehicle's Anti-Lock Brake System (ABS).

### Tire Care

For proper maintenance, safety, and maximum electric energy economy, always maintain the recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.



All specifications (sizes and pressures) can be found on a label attached to the driver's side center pillar.

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For more information on the label, refer to the 'The Loading Information Label' section in chapter 10.

### Recommended cold tire inflation pressures

Check all tire pressures (including the spare) when the tires are cold. 'Cold tires' mean the vehicle has not been driven for at least three hours or driven less than 1 mile (1.6 km).



### WARNING

- · Recommended pressures must be maintained for the best ride, vehicle handling, and minimum tire wear.
- Over-inflation or under-inflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure that may result in loss of vehicle control resulting in a collision.
- Severe under-inflation may lead to severe heat build-up, causing blowouts, tread separation, and other tire failures that result in loss of vehicle control resulting in a collision. This risk is much higher on hot days and when driving for a long time at high speeds.
- Under-inflation may cause excessive wear, poor handling, and reduced energy efficiency. Wheel deformation is also possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, have it inspected by an authorized HYUNDAI dealer.
- · Over-inflation produces a harsh ride, excessive wear at the center of the tire tread, and a greater possibility of damage from road hazards.



# **CAUTION**

Warm tires normally exceed the recommended cold tire pressures by 4 to 6 psi (28 to 41 kPa). Do not release air from warm tires to adjust the pressure. The tires are underinflated. For the recommended inflation pressure, refer to the 'Tires and Wheels' section in chapter 10.

Warm tires normally exceed the recommended cold tire pressures by 4 to 6 psi (28 to 41 kPa). Do not release air from warm tires to adjust the pressure. The tires are underinflated. For the recommended inflation pressure, refer to the 'Tire and Wheels' section in chapter 10 of the complete Owner's Manual.

# Tire sidewall labeling

This information identifies and describes the fundamental characteristics of the tire and also provides the tire identification number (TIN) for safety standard certification. The TIN can be used to identify the tire in case of a recall.



#### 2C\_TireSideWallLabelling

- 1. Manufacturer or brand name
- 2. Tire size designation
- 3. Checking tire life (TIN)
- 4. Tire ply composition and material
- 5. Maximum permissible inflation pressure
- 6. Maximum load rating
- 7. Uniform tire quality grading

#### Manufacturer or brand name

Manufacturer or brand name is shown.

### Tire size designation

A tire's sidewall is marked with a tire size designation. You need this information when selecting replacement tires for your vehicle.

### Example tire size designation:

(These numbers are provided as an example only. Your tire size designator may vary depending on your vehicle.)

- · 255/60R19 113V
  - 255: Tire width in millimeters.
  - 60: Aspect ratio. The tire's section height as a percentage of its width.
  - R: Tire construction code (Radial).
  - 19: Rim diameter in inches.
  - 113: Load Index, a numerical code associated with the maximum load the tire can carry.
  - V: Speed Rating Symbol. See the speed rating chart in this section for additional information.

#### Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one.

Example wheel size designation:

- 7.5J X 18
  - 7.5: Rim width in inches.
  - J: Rim contour designation.
  - 18: Rim diameter in inches.

#### Tire speed ratings

The speed rating is part of the tire size designation on the sidewall of the tire. This symbol corresponds to that tire's designed maximum safe operating speed.

Speed Rating Symbol	Maximum Speed			
S	112 mph (180 km/h)			
Т	118 mph (190 km/h)			

Speed Rating Symbol	Maximum Speed
Н	130 mph (210 km/h)
V	149 mph (240 km/h)
W	168 mph (270 km/h)
Υ	186 mph (300 km/h)

#### Checking tire life (TIN)

Any tires that are over six years old, based on the manufacturing date, (including the spare tire) must be replaced by new ones. You can find the manufacturing date on the tire sidewall (possibly on the inside of the wheel), displaying the DOT Code. The manufacturing date is designated by the last four digits (characters) of the DOT code. The front part of the DOT shows a plant code number, tire size, and tread pattern and the last four numbers indicate the week and year manufactured.

### Example DOT:

#### DOT XXXX XXXX 1525

- · 15: the week of manufacture
- 25: the year of manufacture

### Tire ply composition and material

This indicates the number of layers or plies of rubber-coated fabric in the tire. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others. The letter 'R' means radial ply construction. The letter 'D' means diagonal or bias ply construction; and the letter 'B' means belted-bias ply construction.

#### Maximum permissible inflation pressure

This number is the greatest amount of air pressure that should be put in the tire. Do not exceed the maximum permissible inflation pressure. Refer to the Tire and Loading Information label for recommended inflation pressure.

#### Maximum load rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire. When replacing the tires on the vehicle, always use a tire that has the same load rating as the factory installed tire.

#### **DOT Tire Quality Grading (U.S. Vehicles)**

The tires on your vehicle meet all U.S. Federal Safety Requirements. All tires are also graded for treadwear, traction, and temperature performance according to DOT standards.

### Uniform tire quality grading

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

### Example tire quality grading:

**TREADWEAR 200** 

TRACTION AA

#### TEMPERATURE A

#### Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times (1½) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

These grades are molded on the sidewalls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicle may vary depending on the grade.

#### Traction - AA, A, B & C

The traction grades, from highest to lowest, are AA, A, B, and C. Those grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.



### MARNING.

The traction grade assigned to this tire is based on straight ahead braking traction tests, and does not include acceleration, cornering, hydroplaning, or peak traction characteristics.

### Temperature - A, B & C

The temperature grades are A (the highest), B and C representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperature may cause the material of the tire to degenerate and reduce tire life, and excessive temperature may lead to sudden tire failure. The grade C corresponds to a level of performance that all passenger car tires must meet the Federal Motor Vehicle Safety Standard No. 109. Grades A and B represent higher levels of performance on the laboratory test wheel than the minimum required by law.



### WARNING

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, under-inflation, over-inflation, or excessive loading, either separately or in combination, may cause heat build-up and possible sudden tire failure.

# Check tire inflation pressure

Check your tires, including the spare tire, at least once a month. Use a good quality tire pressure gauge to check the tire pressure. You cannot tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated when they are underinflated.

#### How to check

- 1. Remove the valve cap from the tire valve stem.
- 2. Press the tire gauge firmly onto the valve to get a pressure measurement.

- If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary.
- If the pressure is low, add air until it reaches the recommended pressure.
- If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge.
- 3. Put the valve caps back on the valve stems. Without the valve cap, dirt or moisture may get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

### Wheel alignment and tire balance

The wheels on your vehicle were aligned and balanced carefully at the factory, and you may not need to have your wheels aligned again. If you notice unusual tire wear or your vehicle pulling to one side, the alignment may need to be adjusted.

If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

### NOTICE

Only use approved wheel weights or your vehicle's aluminum wheels may be damaged.

### Tire maintenance

In addition to proper inflation, correct wheel alignment helps decrease the tire wear. If you find a tire is worn unevenly, have your dealer check the wheel alignment. When you have new tires installed, make sure they are balanced. This may increase ride comfort and tire life. Additionally, a tire must always be rebalanced if it is removed from the wheel.

### Tire replacement



2C\_TireWareIndicator

#### 1. Tread wear indicator

If the tire is worn evenly, a tread wear indicator appears as a solid band across the tread. This shows there is less than 1/16 in. (1.6 mm) of tread left on the tire. Replace the tire when this happens.

Do not wait for the band to appear across the entire tread before replacing the tire.

#### Tire traction

Tire traction can be reduced if you drive on worn tires or the tires that are improperly inflated, or on slippery road surfaces. Replace the tires when tread wear indicators

appear. To reduce the possibility of losing control, slow down whenever there is rain, snow, or ice on the road.



### MARNING .

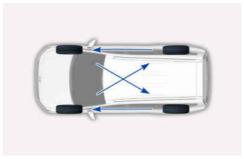
To reduce the risk of serious injury or death:

- · Replace tires that are worn, show uneven wear, or are damaged. Worn tires may cause loss of braking effectiveness, steering control, and traction.
- Always replace tires with the same size as each tire that was originally supplied with this vehicle. Using tires and wheels other than the recommended sizes may cause unusual handling characteristics, poor vehicle control, or negatively affect your vehicle's Anti-Lock Brake System (ABS).
- · When replacing tires (or wheels), it is recommended to replace the two front or two rear tires (or wheels) as a pair. Replacing just one tire may seriously affect your vehicle's handling.
- Tires degrade over time, even when they are not being used. Regardless of the remaining tread, HYUNDAI recommends that tires be replaced after six (6) years.
- Driving in hot climates or excessive loading may accelerate the tire aging process.

# Wheel replacement

When replacing the metal wheels for any reason, make sure the new wheels are equivalent to the original factory units in diameter, rim width, and offset.

### Tire rotation



2C TireRotation

To equalize tread wear, HYUNDAI recommends that the tires be rotated according to the maintenance schedule or sooner if irregular wear develops.

When rotating tires, check for correct balance, uneven wear, and damage.

Look for bumps or bulges in the tread or side of the tire. Replace the tire if you find any of these conditions. Replace the tire if fabric or cord is visible. Disc brake pads should be inspected for wear whenever tires are rotated.

After rotation, be sure to bring the front and rear tire pressures to specification and check wheel nut torque (proper torque is 116-130 lbf-ft (16-18 kaf-m)).



- Do not use the compact spare tire for tire rotation.
- Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics that may cause loss of vehicle control and result in a collision.

Ν					

When installing an unsymmetrical tire, install the side marked 'outside' facing out.

# **Understanding Tires**

#### All season tires

HYUNDAI specifies all season tires on some models to provide good performance for use all year round, including snowy and icy road conditions. All season tires are identified by ALL SEASON and/or M+S (Mud and Snow) on the tire sidewall.

### **Summer tires**

HYUNDAI specifies summer tires on some models to provide superior performance on dry roads. Summer tire performance is substantially reduced in snow and ice. Summer tires do not have the tire traction rating M+S (Mud and Snow) on the tire side wall.

#### **Snow tires**

If you plan to operate your vehicle in snowy or icy conditions, HYUNDAI recommends the use of snow tires on all four wheels.

If you use snow tires, they should be the same size and have the same load capacity as the original tires. Snow tires should be installed on all four wheels. Otherwise, poor handling may result. Snow tires should carry 4 psi (28 kPa) more air pressure than the pressure recommended for the standard tires on the tire label located on the driver's side center pillar, or up to the maximum pressure shown on the tire sidewall, whichever is less. Do not drive faster than 75 mph (120 km/h) when your vehicle is equipped with snow tires.

Snow tires have better snow traction than all season tires and may be more appropriate in some areas.

### Radial-ply tires

Radial-ply tires provide improved tread life, road hazard resistance and smoother high speed ride. The radial-ply tires used on this vehicle are of belted construction, and are selected to complement the ride and handling characteristics of your vehicle. Radial-ply tires have the same load carrying capacity, as bias-ply or bias belted tires of the same size, and use the same recommended inflation pressure. Mixing of radial-ply tires with bias-ply or bias belted tires is not recommended. Any combinations of radial-ply and bias-ply or bias belted tires when used on the same vehicle will seriously deteriorate vehicle handling. The best rule to follow is to use identical radial-ply tires as a pair for the front tires and rear tires.

Longer wearing tires can be more susceptible to irregular tread wear. It is very important to follow the tire rotation interval in this chapter to achieve the tread life potential of these tires. Cuts and punctures in radial-ply tires are repairable only in the tread area, because of sidewall flexing. Consult your tire dealer for radial-ply tire repairs.



Do not mix bias ply and radial ply tires under any circumstances. This may cause unusual handling characteristics that may cause loss of vehicle control and result in a collision.

### Low aspect ratio tires

The aspect ratio is lower than 50 on low aspect ratio tires.

Because low aspect ratio tires are optimized for handling and braking, their sidewall is a little stiffer than a standard tire. Also low aspect ratio tires tend to be wider and consequently have a greater contact patch with the road surface. In some instances they may generate more road noise compared with standard tires.



### CAUTION

Low aspect wheels and tires are easily damaged. To reduce the risk of damage:

- When driving on rough roads, passing over a pothole, speed bump, manhole, or curb stone, drive the vehicle slowly not to damage the tires and wheels. Damage is not covered by your vehicle warranty.
- Inspect the tire condition and pressure every 1,800 mi. (3,000 km).
- It is difficult to visually inspect for tire damage with your eyes. If any damage is found, contact your authorized HYUNDAI dealer to replace the tire.

### Tire terminology and definitions

- Air pressure: The amount of air inside the tire pressing outward on the tire. Air pressure is expressed in pounds per square inch (psi) or kilopascal (kPa).
- Accessory weight: This means the combined weight of optional accessories. Some examples of optional accessories are dual clutch transmission, power seats, and air conditioning.
- Aspect ratio: The relationship of a tire's height to its width.
- Belt: A rubber coated layer of cords that is located between the plies and the tread.
   Cords may be made from steel or other reinforcing materials.
- Bead: The tire bead contains steel wires wrapped by steel cords that hold the tire onto the rim.
- Bias ply tire: A pneumatic tire in which the plies are laid at alternate angles less than 90 degrees to the centerline of the tread.
- Cold tire pressure: The amount of air pressure in a tire, measured in pounds per square inch (psi) or kilopascals (kPa) before a tire has built up heat from driving.
- **Curb weight**: This means the weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil and coolant, but without passengers and cargo.
- DOT markings: A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation motor vehicle safety standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also identify the tire manufacturer, production plant, brand and date of production.
- GVWR: Gross Vehicle Weight Rating
- GAWR FRT: Gross Axle Weight Rating for the Front Axle.

- GAWR RR: Gross Axle Weight Rating for the Rear axle.
- Intended outboard sidewall: The side of an asymmetrical tire, that must always face outward when mounted on a vehicle.
- Kilopascal (kPa): The metric unit for air pressure.
- Light Truck (LT) tire: A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.
- Load ratings: The maximum load that a tire is rated to carry for a given inflation pressure.
- Load index: An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.
- Maximum inflation pressure: The maximum air pressure to which a cold tire may be inflated. The maximum air pressure is molded onto the sidewall.
- Maximum load rating: The load rating for a tire at the maximum permissible inflation
  pressure for that tire.
- Maximum loaded vehicle weight: The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.
- Normal occupant weight: The number of occupants a vehicle is designed to seat multiplied by 150 lbs. (68 kg).
- Occupant distribution: Designated seating positions.
- Outward facing sidewall: An asymmetrical tire has a particular side that faces outward
  when mounted on a vehicle. The outward facing sidewall bears white lettering or bears
  manufacturer, brand, and/or model name molding that is higher or deeper than the
  same moldings on the inner facing sidewall.
- Passenger (P-Metric) tire: A tire used on passenger cars and some light duty trucks and multipurpose vehicles.
- Ply: A layer of rubber-coated parallel cords.
- Pneumatic tire: A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel provides the traction and contains the gas or fluid that sustains the load.
- Pneumatic options weight: The combined weight of installed regular production
  options weighing over 5 lbs. (2.3 kg) in excess of the standard items which they replace,
  not previously considered in curb weight or accessory weight, including heavy duty
  breaks, ride levelers, roof rack, heavy duty battery, and special trim.
- Recommended inflation pressure: Vehicle manufacturer's recommended tire inflation pressure as shown on the tire placard.
- Radial ply tire: A pneumatic tire in which the ply cords that extend to the beads are laid at 90 degrees to the centerline of the tread.
- Rim: A metal support for a tire and upon which the tire beads are seated.
- Sidewall: The portion of a tire between the tread and the bead.
- **Speed rating:** An alphanumeric code assigned to a tire indicating the maximum speed at which a tire can operate.
- Traction: The friction between the tire and the road surface. The amount of grip provided.
- **Tread**: The portion of a tire that comes into contact with the road.

- Treadwear indicators: Narrow bands, sometimes called 'wear bars', that show across the tread of a tire when only 1/16 in. of tread remains.
- **UTQGS**: Uniform Tire Quality Grading Standards is a tire information system that provides consumers with ratings for a tire's traction, temperature and treadwear. Ratings are determined by tire manufacturers using government testing procedures. The ratings are molded into the sidewall of the tire.
- Vehicle capacity weight: The number of designated seating positions multiplied by 150 lbs. (68 kg) plus the rated cargo and luggage load.
- Vehicle maximum load on the tire: Load on an individual tire due to curb and accessory weight plus maximum occupant and cargo weight.
- Vehicle normal load on the tire: Load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.
- Vehicle placard: A label permanently attached to a vehicle showing the original equipment tire size and recommended inflation pressure.

#### **Other Maintenance Items**

# Cooling system

Check the cooling system components such as radiator, coolant reservoir, hoses, and connections for leakage and damage. Replace any damaged parts.

### Brake hoses and lines

Visually check for proper installation, chafing, cracks, deterioration, and any leakage. Replace any deteriorated or damaged parts immediately.

# Parking brake

Inspect the parking brake system including the cables.

# Brake discs, pads, calipers, and rotors

Check the pads, the disc, and the rotor for any excessive wear-out. Inspect calipers for any fluid leakage.

### Drive shaft and related

Check the drive shaft, boots, clamps, rubber couplings, and center-bearing rubber for cracks, deterioration, or damage. Replace any damaged parts and if necessary, repack the grease.

# Suspension mounting bolts

Check the suspension connections for looseness or damage. Retighten to the specified torque.

# Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and the vehicle off, check for excessive free-play in the steering wheel. Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage.

# Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage.

### **Fuses**

A vehicle's electrical system is protected from electrical overload damage by fuses. This vehicle has 2 (or 3) fuse panels, one located in the driver's side panel bolster, the other in the motor compartment.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse is melted or broken.

If the electrical system does not work, first check the driver's side fuse panel.



### MARNING

Never replace a fuse with anything but another fuse of the same rating.

- A higher capacity fuse may cause damage and possibly cause a fire.
- Do not install a wire or aluminum foil instead of the proper fuse even as a temporary repair. It may cause extensive wiring damage and possibly a fire.



### CAUTION

Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.

### INFORMATION

Not all fuse panel descriptions in this manual may be applicable to your vehicle. When you inspect the fuse panel on your vehicle, refer to the fuse panel label. Inside the fuse panel cover, you can find the label describing fuse names and ratings.

#### **Instrument Panel Fuse Panel**



		BPARE	ğ	2VC	B	BRAKE SMITCH	Ø					1 MEMORY	á	A/BAG NO	Ø	5- <b>9FB</b>	ă	IG3	ă
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I P/SEAT FR RH)	á	E/SEAT (CRV)	Ŕ											•			_		7

1C\_InstrumentPanelFuseLabel\_2

Fuse Name	Fuse Rating	Circuit Protected
A/C2	7.5 A	Front/Rear A/C Controller, A/C Control Module
BRAKE SWITCH	7.5 A	Stop Lamp Switch, BDC
MEMORY1	10 A	Driver/Passenger Door Mood Lamp, Rear Door Mood Lamp LH/RH, Rear Corner Radar LH/RH, Front/Rear A/C Controller, ADAS Unit (Parking), BDC, A/C Control Module, Cluster Unit, Head-Up Display, Mood Lamp Unit, Mood Lamp (Crash Pad), ADP Unit, Finger Print Module
A/BAG IND	7.5 A	Overhead Console
E-SHIFTER2	10 A	SCU, Shift Lever & Start Button
ĪG3 10	10 A	CCU, ICCU, VCMS, V2L Unit

Fuse Name	Fuse Rating	Circuit Protected
MODULE7	10 A	Steering Tilt & Telescopic Unit, ICC Unit, Data Link Connector, Rain Sensor, Multifunction Switch, Hazard Lamp Switch, 2ND Power Seat Module LH/RH, Power Liftgate Unit, Rear Blower Relay, Driver Power Window Switch 3RD Seat Folding Unit, Driver Power Seat Switch, Driver Power Seat Module
E-SHIFTER1	10 A	Shift Lever & Start Button
CCU	10 A	CCU
MEMORY2	7.5 A	CDCU, CCNC Keyboard, Smart Phone Wireless Charger Unit
BDC2	7.5 A	BDC
MODULE2	10 A	CCU, Stop Lamp Switch
Ī <u>G</u> 3 9	10 A	Incar Temperature Sensor, Front/Rear A/C Controller, Infotainment Jack Assembly, A/C Control Module, A/C Heater (Front), Rear A/C Actuator Assembly, 2ND Power Seat Module LH/RH, 3RD Seat Folding Unit
POWER HANDLE	15 A	Steering Tilt & Telescopic Unit
wireless DCU	7.5 A	DCU
CHILD LOCK	15 A	Child Lock/Unlock Relay
MULTIMEDIA	25 A	CCNC Head Unit
MODULE4	10 A	Data Link Connector, ICC Unit, Electro Chromic Mirror, CCNC Head Unit, Smart Phone Wireless Charger Unit, Finger Print Module, Driver Power Seat Module, AMP, ADP Unit
CLUSTER	7.5 A	Cluster Unit, Head-Up Display
ĪG3 8	10 A	CCNC Head Unit
SBCM (DRV)	20 A	Driver SBCM
SBCM (PASS)	20 A	Passenger SBCM
MODULE6	7.5 A	Head Lamp LH/RH
SUNROOF1	20 A	Sunroof Controller (Glass Motor)
MODULE8	10 A	Multifunction Switch, Driver Power Window Switch

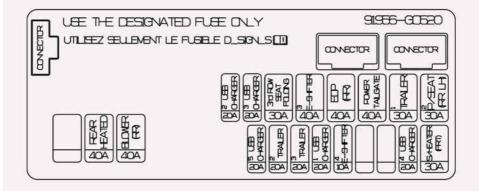
Fuse Name	Fuse Rating	Circuit Protected
MDPS2	7.5 A	MDPS Unit
MODULE1	10 A	ADP Unit, AMP, Console Mood Lamp #1~#2, CCNC Keyboard, CCNC Head Unit, DCU, ADAS Unit (Parking), BDC, CCU, Infotainment Jack Assembly
P/SEAT (PASS)1	30 A	Passenger Power Seat Switch
P/SEAT (RR LH)1	25 A	2ND Power Seat Module LH
WASHER	15 A	Multifunction Switch
CHARGER	10 A	VCMS, ICCU, Charging Connector Door Assembly, Relay Box (Charger Lock/Unlock Relay)
BDC1	10 A	BDC, Bluetooth Unit #1~#2, UWB Unit (Front), UWB Unit (Front LH/RH), UWB Unit (Rear LH/RH)
AIR BAG1	10 A	Airbag Control Module, Passenger Occupant Detection Sensor
P/SEAT (PASS)2	25 A	Passenger Seat Relay Unit
P/WINDOW (RH)	30 A	Passenger Safety Power Window Module, Rear Safety Power Window Module RH, Rear Power Window Switch RH
MODULE5	7.5 A	BDC
MODULE9	10 A	Driver/Passenger Door Puddle Lamp, Driver/Passenger Door Outside Handle, Rear Door Puddle Lamp LH/RH
P/SEAT (RR RH)2	25 A	2ND Power Seat Module RH
ĀMP	25 A	AMP
SUNROOF2	20 A	Sunroof Controller (Blind Motor)
MODULE3	10 A	Front Radar, Inverter (Front), Front Corner Radar LH/RH, Front Console Switch, CDCU, Rear Corner Radar LH/RH, Inverter (Rear), ADAS Unit (Parking), ADAS Unit (Driving), Front View Camera (ADAS), Steering Tilt & Telescopic Unit
P/SEAT (DRV)1	30 A	Driver Power Seat Switch, Driver Power Seat Module

Fuse Name	Fuse Rating	Circuit Protected
P/WINDOW (LH)	30 A	Driver Safety Power Window Module, Rear Safety Power Window Module LH, Rear Power Window Switch LH
AIR BAG2	10 A	Airbag Control Module
DOOR LOCK	20 A	Door Lock/Unlock Relay, Two Turn Unlock Relay
S/HEATER (RR)	25 A	2ND Seat Heater Module, 2ND Air Ventilation Seat Module, 2ND Power Seat Module LH/RH
P/SEAT (DRV)3	10 A	Driver Air Cell (7Cell)
START	7.5 A	BDC, VCU
P/SEAT (RR RH)1	30 A	2ND Seat RH Folding Actuator, 2ND Power Seat Module RH
P/SEAT (DRV)2	25 A	Driver Power Seat Switch, Driver Power Seat Module

# Cargo Compartment Fuse Panel



2C\_CargoPanelFuseReplacement



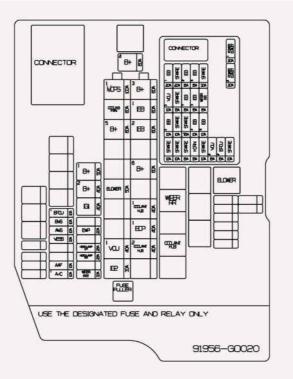
1C\_CargoFuseLabel\_1

Fuse name	Fuse Rating	Circuit Protected
REARR HEATED	40 A	Rear Junction Block (Rear Heaterd Relay)
BLOWER (RR)	40 A	Rear Junction Block (Rear Blower Relay)
USB CHARGER2	20 A	Driver Seat USB Connector
USB CHARGER3	20 A	Passenger Seat USB Connector
3rd ROW SEAT FOLDING	30 A	3RD Seat Folding Unit
E-SHIFTER3	40 A	scu
EOP (RR)	40 A	Traction Motor Oil Pump (Rear)
POWER TAILGATE	40 A	Power Liftgate Unit
TRAILER1	30 A	Trailer Connector

Fuse name	Fuse Rating	Circuit Protected
P/SEAT (RR LH)2	30 A	2ND Seat LH Folding Actuator, 2ND Power Seat Module LH
USB CHARGER5	20 A	Luggage USB Charging Connector RH
TRAILER2	20 A	E-Brake (Trailer)
TRAILER3	20 A	Trailer Connector
USB CHARGER1	20 A	Infotainment Jack Assembly
E-Shifter4	10 A	scu
USB CHARGER4	20 A	Luggage USB Charging Connector LH
S/HEATER (FRT)	30 A	Front Seat Heater & VENT. Unit

# **Motor Compartment Fuse Panel**





1C\_MotorRoomFuseBoxLabel\_1

# Motor compartment junction block

Туре	Fuse Name	Fuse Rating	Circuit Protected
	MDPS1	100 A	MDPS Unit
MULTI	COOLING FAN	80 A	Cooling Fan Motor
FUSE- Ā	B+5	60 A	PDC (Fuse - AIR BAG2, SUNROOF1, SUNROOF2, MODULE9, CHARGER, AMP, P/SEAT(DRV)3)
	BLOWER	50 A	Blower Relay
	VCU1	40 A	VCU
MULTI FUSE- B	B+3	60 A	PDC (Fuse - MODULE7, P/WINDOW(LH), P/WINDOW(RH), SPARE(B+), POWER HANDLE, P/SEAT(RRLH)1, P/SEAT(RRRH)1, wireless DCU, E-SHIFTER1,

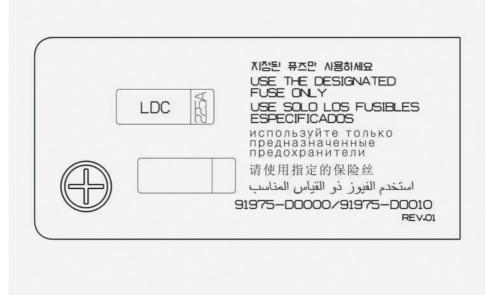
Туре	Fuse Name	Fuse Rating	Circuit Protected		
			SBCM(DRV), SBCM(PASS), P/SEAT(DRV)1, P/SEAT(DRV)2, P/SEAT(PASS)1, P/SEAT(PASS)2)		
	ĪEB1	60 A	IEB Unit		
	ĪĒB2	60 A	IEB Unit		
	B+6	60 A	PCB Block (IG3 Main Relay, Wiper Power Relay, Fuse - HORN, EPCU2, VCU2)		
	COOLANT HUB1	40 A	Coolant Driver		
	EOP1	40 A	Traction Motor Oil Pump (Front)		
	COOLANT HUB2	40 A	Coolant HUB Relay (RLY.5)		
	B+4	60 A	PDC (Long Term Load Latch Realy, IPS3, Fuse - CHILD LOCK, DOOR LOCK, BDC1, BRAKE SWITCH, P/SEAT(RR RH)2, S/HEATER(RR), CCU)		
SB	B+1	50 A	PDC (IPS4, IPS5, IPS6, IPS7)		
	B+2	40 A	PDC (IPS11, IPS12)		
	POWER ON	40 A	PCB Block (Power On Relay, ACC Relay)		
	EWP	20 A	Electronic Water Pump (BSA)		
	HEAD LAMP LH	25 A	Head Lamp LH		
	HEAD LAMP RH	25 A	Head Lamp RH		
	WIPER FRT	30 A	Front Wiper Motor		
MICRO	EPCU1	10 A	Inverter (Rear)		
	BMS	10 A	вми		
	AMS	10 A	12 V Battery Sensor		
	VESS	10 A	VESS Unit		
	AAF	10 A	Active Air Flap Unit LH/RH		

Туре	Fuse Name	Fuse Rating	Circuit Protected	
	A/C1	10 A	Blower Relay, A/C Control Module	

# **Battery Fuse Panel**



2C\_BatteryFuseLabel



1C\_BatteryFuseLabel\_1

Fuse Name	Fuse Rating	
LDC	225 A	

# **How to Check Fuses by Type**

Туре	O: Normal/X: Disconnection
Blade	o x
Cartridge	o x
Multi	num X
Midi	o x

# **Replacing Fuses**

# Instrument panel fuse replacement

1. Turn off the vehicle and all other switches.

2. Open the fuse panel cover. Refer to the label on the inside of the fuse panel cover to locate the suspected fuse location.



2C InstrumentPanelFuseReplacement

3. Pull the suspected tool straight out. Use the removal tool provided in the motor compartment fuses panel cover.



2C\_EngineRoomFuseReplacement

- 4. Check the removed fuse and replace it if it is blown. Spare fuses are provided in the instrument panel fuse panels (or in the motor compartment fuse panel).
- 5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it is not tight, contact an authorized HYUNDAI dealer.

In an emergency, if you do not have a spare fuse, use a fuse of the same rating from a circuit you may not need for operating the vehicle.

# Motor compartment panel fuse replacement

### Blade fuse/Cartridge fuse

- 1. Turn off the vehicle and all other switches.
- 2. Remove the fuse panel cover by pressing the tap and pulling up. Refer to the label on the inside of the fuse panel cover to locate the suspected fuse location.

3. Pull the suspected fuse straight out. Use the removal tool provided in the motor compartment fuses panel cover.



2C\_EngineRoomFuseReplacement\_2



2C\_EngineRoomFuseReplacement\_3

- 4. Check the removed fuse and replace it if it is blown. To remove or insert the fuse, use the fuse puller in the motor compartment fuse panel.
- 5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it is not tight, contact an authorized HYUNDAI dealer.



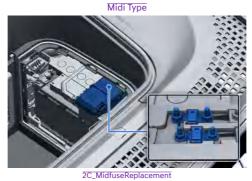
# CAUTION

Always securely install the fuse panel cover. Water may contact the fuse and cause an electrical failure.

# Multi fuse/Midi fuse



 ${\color{red}2C\_EngineRoomFuseReplacement\_4}$ 



If the multi fuse or midi fuse is blown, contact an authorized HYUNDAI dealer.

# **Light Bulbs**

Contact an authorized HYUNDAI dealer to replace most vehicle light bulbs. It is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true for removing the headlight assembly to get to the bulb(s). Removing/installing the headlight assembly may result in damage to the vehicle.



### WARNING

- Prior to replacing a light bulb, depress the brake pedal, shift to P (Park), apply the parking brake, move the Start/Stop button to the OFF position, and take the key with you when leaving the vehicle to avoid sudden movement of the vehicle and to prevent possible electric shock.
- Be aware the bulbs may be hot and may burn your fingers.

### NOTICE

- Be sure to replace the burned-out bulb with one of the same wattage to prevent damage to the fuse or electrical wiring system.
- To prevent damage, do not clean the headlight lens with chemical solvents or strong detergents.

#### INFORMATION

- The headlight and tail light lenses could appear to have condensation inside if the vehicle is washed after driving or if the vehicle is driven in wet weather. This condition is caused by a higher temperature inside the light and a cooler outside temperature. Moisture that condenses in the light is removed after driving with the light on. If the moisture is not removed, contact an authorized HYUNDAI dealer.
- A normally functioning light may flicker momentarily to stabilize the vehicle's electrical control system.
  - If the light goes out, or continues to flicker, contact an authorized HYUNDAI dealer.
- The parking light may not turn on when the parking light switch is turned on, but the parking light and headlight switch may turn on when the headlight switch is turned on. This may be caused by network failure or vehicle electrical control system malfunction. If this occurs, contact an authorized HYUNDAI dealer.
- Adjust the headlight aim after a collision or the headlight is replaced.

# Light desiccant

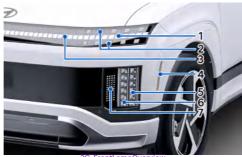
### tif equipped

This vehicle is equipped with desiccant to reduce fogging inside the headlight, Daytime Running Light, parking light, tail light, and rear turn signal light due to moisture. The desiccant is consumable and its performance may change based on the used period or environment. If fogging inside the headlight, Daytime Running Light, parking light, tail light, and rear turn signal light due to moisture continues for a long time, contact an authorized HYUNDAI dealer.

### **Replacing the LED Light**

If the LED light does not operate, contact an authorized HYUNDAI dealer for replacement. The LED light cannot be replaced as a single unit. A skilled technician should check or repair the LED light, for it may damage related parts of the vehicle.

# Headlight, parking light, turn signal light, daytime running light (DRL) replacement



2C\_FrontLampOverview

- 1. Parking light/Daytime Running Light (DRL)
- 2. Turn signal light
- 3. Parking light
- 4. Side marker
- 5. Headlight (Low)
- 6. Headlight (High)/Low beam assist
- 7. Parking light

# Side repeater light replacement



# Rear combination light replacement



- 1. High mounted stop light
- 2. Tail/Stop light/Side marker
- 3. Turn signal light
- 4. Reverse light

# License plate light replacement



# Interior light replacement

Map lamp, Personal lamp, Room lamp, Multi console storage lamp, Vanity mirror lamp, Glove box lamp, Front trunk lamp, Mood lamp, and Cargo area lamp



2C\_MapLampLED

### Personal lamp



2C\_PersonalLamp\_2

# Room lamp



2C\_RoomLampLED

# Multi console storage lamp



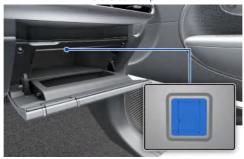
2C\_MultiConsole

# Vanity mirror lamp



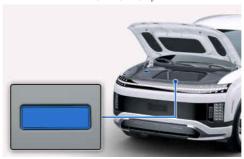
2C\_SunvisorLampLED

# Glove box lamp



2C\_GloveBoxLampLED

# Front trunk lamp



2C\_FrontTrunkLampLED

# Mood lamp (if equipped)



2C\_MoodLamp

# Cargo area lamp



2C\_LuggageRoomLamp

# **Appearance Care**

### **Exterior Care**

### Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

#### Finish maintenance

### Washing

To help protect your vehicle's finish from rust and deterioration, with a frequency of at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, wash it after each off-road trip. Pay special attention to the removal of any accumulation of salt, dirt, mud, and other foreign materials. Make sure the drain holes in the lower edges of the doors and rocker panels are kept clear and clean.

Insects, tar, tree sap, bird droppings, industrial pollution, and similar deposits may damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. Use a mild soap, safe for use on painted surfaces.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.



# MARNING

After washing the vehicle, dry the brakes by applying them lightly while maintaining a slow forward speed.



# CAUTION



Water washing in the motor compartment including high pressure water washing may cause the failure of electrical circuits located in the motor compartment.

#### NOTICE

- High pressure water may damage front and rear cameras, sensors, vehicle trim, and boots (rubber or plastic covers) or connectors.
- Do not use strong soap, chemical detergents, or hot water, and do not wash the vehicle in direct sunlight or when the body of the vehicle is warm.
- To prevent damage to the plastic parts, do not clean with chemical solvents or strong detergents.
- Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle to prevent damage.
- Matte paint finish vehicle (if equipped)

To prevent damage the matte finish:

- Do not go through an automatic car wash with rotating brushes.
- Avoid using a steam cleaner. High temperature steam may leave stains that are difficult to remove.
- Use a soft cloth (for example, microfiber towel or sponge) when washing your vehicle
  and dry with a microfiber towel. When you hand wash your vehicle, do not use a
  cleaner that finishes with wax. If the vehicle surface is too dirty (sand, dirt, dust,
  contaminant, etc.), clean the surface with water before washing the vehicle.

#### Waxing

A good coat of wax helps protect your paint from contaminants. Wax the vehicle when water no longer beads on the paint.

Always wash and dry the vehicle before waxing. Use a good quality liquid or paste wax, and follow the manufacturer's instructions. Wax all metal trim to protect it and to maintain its luster.

Removing oil, tar, and similar materials with a spot remover usually strips the wax from the finish. Be sure to re-wax these areas even if the rest of the vehicle does not yet need waxing.

#### NOTICE

- Do not wipe dust or dirt off the body with a dry cloth to prevent scratching the finish.
- Do not use steel wool, abrasive cleaners, or strong detergents containing highly
  alkaline or caustic agents on chrome-plated or anodized aluminum parts to prevent
  discoloration or paint deterioration.
- Matte paint finish vehicle (if equipped)
  - Do not use any polish protector such as detergent, abrasive, or polish. If wax is applied, remove the wax immediately using a silicone remover. If any tar or tar contaminant is on the surface, use a tar remover to clean.
  - Be careful not to apply too much pressure on the painted area.

# Finish damage repair

Deep scratches or stone chips on the painted surface must be repaired promptly. Exposed metal quickly rusts and may develop into a major repair expense.

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Matte paint finish vehicle (if equipped)

It is impossible to modify only repaint the damaged area. The whole part must be repainted as necessary. If the vehicle is damaged and painting is required, contact an authorized HYUNDAI dealer.

#### INFORMATION

If your vehicle is damaged and requires any metal repair or replacement, make sure the body shop applies anti-corrosion materials to the parts repaired or replaced.

# Bright-metal maintenance

- To remove road tar and insects, use a tar remover, not a scraper or other sharp object.
- To protect the surfaces of bright metal parts from corrosion, apply a coating of wax or chrome preservative and rub to a high luster.
- During winter weather or in coastal areas, cover the bright metal parts with a heavier coating of wax or preservative. If necessary, coat the parts with non-corrosive petroleum jelly or other protective compound.

### Underbody maintenance

Corrosive materials used for ice and snow removal and dust control may collect on the underbody. If these materials are not removed, accelerated rusting may occur on underbody parts such as the frame and floor pan, even though they have been treated with rust protection.

Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It does more harm than good to wet down the road grime without removing it. The lower edges of doors, rocker panels, and frame members have drain holes that must not be allowed to clog with dirt. Trapped water in these areas may cause rusting.

#### Aluminum wheel maintenance

The aluminum wheels are coated with a clear protective finish.

### NOTICE

- Do not use abrasive cleaner, polishing compound, solvent, or wire brushes on aluminum wheels.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water. Also, clean the wheels after driving on salted roads.
- Do not wash the wheels with high-speed car wash brushes.
- Do not use any cleaners containing acid or alkaline detergents.

# Corrosion protection

### **Protecting your vehicle from corrosion**

By using the most advanced design and construction practices to combat corrosion, HYUNDAI produces vehicles of the highest quality. However, this is only part of the

job. To achieve the long-term corrosion resistance your vehicle can deliver, the owner's cooperation and assistance are also required.

#### **Common causes of corrosion**

- Road salt, dirt, and moisture that is allowed to accumulate underneath the vehicle
- Removal of paint or protective coatings by stones, gravel, abrasion, minor scrapes, and dents that leave unprotected metal exposed to corrosion

#### **High-corrosion areas**

If you live in an area where your vehicle is regularly exposed to corrosive materials, corrosion protection is particularly important. Some of the common causes of accelerated corrosion are road salts, dust control chemicals, ocean air, and industrial pollution.

#### Moisture breeds corrosion

Moisture creates the conditions in which corrosion is most likely to occur. For example, corrosion is accelerated by high humidity, particularly when temperatures are just above freezing. In such conditions, the corrosive material is kept in contact with the vehicle surfaces by moisture that is slow to evaporate.

Mud is particularly corrosive because it is slow to dry and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain moisture and promote corrosion.

High temperatures may also accelerate corrosion of parts that are not properly ventilated so the moisture can be dispersed. For all these reasons, it is particularly important to keep your vehicle clean and free of mud or accumulation of other materials.

### To help prevent corrosion

- Keep your vehicle clean
  - The best way to prevent corrosion is to keep your vehicle clean and free of corrosive materials. Attention to the underside of the vehicle is particularly important.
  - If you live in a high-corrosion area where road salts are used, near the ocean, areas with industrial pollution, acid rain, and the like, take extra care to prevent corrosion.
     In winter, hose off the underside of your vehicle at least once a month and be sure to clean the underside thoroughly when winter is over.
  - When cleaning underneath the vehicle, pay particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job. Just dampening the accumulated mud rather than washing it away may accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.
  - When cleaning lower door panels, rocker panels, and frame members, make sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.
- Keep your garage dry
  - Do not park your vehicle in a damp, poorly ventilated garage. This creates a favorable environment for corrosion.
  - This is particularly true if you wash your vehicle in the garage or drive it into the garage when it is still wet or covered with snow, ice, or mud. Even a heated garage may contribute to corrosion unless it is well ventilated so moisture is dispersed.

- Keep paint and trim in good condition
  - Scratches or chips in the finish must be covered with 'touch-up' paint as soon as possible to reduce the possibility of corrosion. If bare metal is showing through, the attention of a qualified body and paint shop is recommended.
  - Bird droppings are highly corrosive and may damage painted surfaces in just a few hours. Always remove bird droppings as soon as possible.

### **Interior Care**

### Interior general precautions

Prevent caustic solutions such as perfume and cosmetic oil, from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately.

### NOTICE

- Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle because this may damage them.
- When cleaning leather products (steering wheel, seats, etc.), use neutral detergents or low alcohol content solutions. If you use high alcohol content solutions or acid/alkaline detergents, the color of the leather may fade or the surface may get stripped off.

### Cleaning the upholstery and interior trim

### **Vehicle interior surfaces**

### t if equipped

Remove dust and loose dirt from interior surfaces with a whisk broom or a vacuum cleaner. If necessary, clean interior surfaces with a mixture of warm water and mild non-detergent cleaner (test all cleaners on a concealed area before use).

### **Fabric**

#### tif equipped

Remove dust and loose dirt from fabric with a whisk broom or vacuum cleaner. Clean with a mild soap solution recommended for upholstery or carpets. Remove fresh spots immediately with a fabric spot cleaner. If you do not pay attention to fresh spots immediately, the fabric may be stained and its color may be affected. Also, its fire-resistant properties may be reduced if the material is not properly maintained.

#### NOTICE

Using anything but recommended cleaners and procedures may affect the fabric's appearance and fire-resistant properties.

#### Leather

### f equipped

Leather is made from the outer skin of an animal, which goes through a special process to be available for use. Because it is a natural product, each part differs in thickness or density.

Wrinkles may appear as a natural result of stretching and shrinking depending on the temperature and humidity. Wrinkles may appear naturally from usage. It is not a fault of the products.

The seat is made of stretchable fabric to improve comfort. The parts contacting the body are curved and the side supporting area is high which provides driving comfort and stability.

- Caring for the leather seats
  - Vacuum the seat periodically to remove dust and sand on the seat. It prevents abrasion or damage of the leather and maintain its quality.
  - Wipe the natural leather seat cover often with a dry or soft cloth.
  - Use of proper leather protector may prevent abrasion of the cover and helps maintain the color. Be sure to read the instructions and consult a specialist when using leather coating or protective agent.
  - Light colored (beige, cream beige) leather may be easily contaminated and the stains may be noticeable.
  - Avoid wiping with a wet cloth. It may cause the surface to crack.
- Cleaning the leather seats
  - Remove all spills instantly.
  - For cosmetic products (sunscreen, foundation, etc.), apply cleansing cream on a cloth and wipe the contaminated spot. Wipe off the cream with a damp cloth and then wipe with a dry cloth.
  - For beverages (coffee, soft drink, etc.), apply a small amount of neutral detergent and wipe until it does not smear.
  - For oil, remove oil instantly with an absorbable cloth and wipe with stain remover used only for natural leather.
  - For chewing gum, harden the gum with ice and remove it gradually.
- Handling prime napa leather (if equipped)

Try to avoid excessive sunlight and heat exposure. Excessive sunlight and heat exposure naturally fades and dries out napa leather, causing wrinkles and discoloration. If the napa leather is wet with liquid, immediately clean it with lint-free cloth to minimize damage. Do not scratch the napa leather surface with a sharp object. If your napa leather seat is bright colored, it may be contaminated or stained from dyed materials such as jeans.

#### NOTICE

- Wrinkles or abrasions that appear naturally from usage are not covered by warranty.
- Belts with metallic accessories, zippers, or keys inside the back pocket may damage the seat fabric.
- Be sure not to wet the seat. It may change the nature of natural leather.
- Jeans or clothes that could bleach may contaminate the surface of the seat covering fabric.

#### Interior wooden trim

Use a wooden furniture protector (for example, wax or coating compound) to clean the interior wooden trim.

Sharp objects (for example, driver or knife), adhesive materials, tapes, or any strong impacts may damage the interior wooden trim.



# **CAUTION**

- · If the coating finish over the interior wooden trim is removed, moisture may damage or change wood traits.
- If the interior wooden trim is damaged, you may get a splinter from the wood surface. Have the damaged interior wooden trim replaced by an authorized HYUNDAI dealer.

## Cleaning the seat belt webbing

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap.



## WARNING

Do not bleach or re-dye the webbing because this may weaken the seat belt.

### Cleaning the interior window glass

If the interior glass surfaces need to be cleaned, use a glass cleaner. Follow the directions on the glass cleaner container.



#### A CAUTION

Do not scrape or scratch the inside of the rear window. This may result in damage to the rear window defroster grid.

# **California Perchlorate Notice**

Notice to California Vehicle Dismantlers: The airbag module, safety belt pretensioners, and remote batteries must be disposed of according to Title 22 California Code of Regulations Section 67384.10 (a). Special handling may be necessary. See: www.dtsc.ca.gov/hazardouswaste/perchlorate. Contact an authorized HYUNDAI dealer for handling and disposal.

# 10. Vehicle Information, Reporting Safety Defects, and Consumer Information

This chapter provides additional information on the vehicle, such as the vehicle dimensions and vehicle identification information.

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- The illustrations are shown as a guide. The actual shape may differ from the illustration.
- The information provided may differ depending on which functions are applicable to your vehicle.

# **Vehicle Specifications**

## **Dimensions**

Items		în. (mm)	
Overal	l length	199.21 (5,060)	
Overa	II width	77.95 (1,980)	
Overal	l height	70.47 (1,790)	
	255/60 R19	<del>67.01 (1,702)</del>	
Front tread	275/50 R20	66.61 (1,692)	
	285/45 R21	66.61 (1,692)	
	255/60 R19	67.47 (1,713.8)	
Rear tread	275/50 R20	67.08 (1,703.8)	
	285/45 R21	67.08 (1,703.8)	
Wheelbase		123.23 (3,130)	

## **Electric Vehicle Specifications**

<u>ltem</u>		Long	Performance	
		2WD	AWD	AWD
Motor	Max. output (kW)	Rear 160	Front 66.1 Rear 160	Front 157.3 Rear 157.3

ltem		Long	Performance	
		2WD	ĀWD	AWD
	Max. torque (Nm)	Rear 350	Front 255 Rear 350	Front 350 Rear 350
	Capacity (kWh)	110.3	110.3	110.3
Battery (Lithium- ion)	Power output (kW)	354	354	354
	Voltage (V)	610	610	610
Charger (OBC: On-Board Battery Chargers)	Max. output (kW)	7 (single-phase) / 10.5 (Three- phase)	7 (single-phase) / 10.5 (Three-phase)	7 (single- phase) / 10.5 (Three-phase)

## **Tires and Wheels**

			Inflation pressure psi (kPa)				
Items	Tire size	Wheel size	Norma	Normal load		ım load	Wheel nut torque lbf-ft (kgf-m, N-m)
			Front	Rear	Front	Rear	
	255/60R19	8.0 J X 19	39 (270)	40 (275)	39 (270)	40 (275)	
Full size tire	275/50R20	8.0 J X 20	38 (260)	39 (270)	38 (260)	39 (270)	116-130 (16-18, 157-176)
	285/45R21	9.0 J X 21	38 (260)	39 (270)	38 (260)	39 (270)	



# CAUTION

When replacing tires, ALWAYS use the same size, type, brand, construction, and tread pattern supplied with the vehicle. If not, it can damage the related parts or make it work irregularly.

#### NOTICE

- It is permissible to add 3 psi (20 kPa) to the standard tire pressure specification if colder temperatures are expected soon. Tires typically lose 1 psi (7 kPa) for every 12 °F (7 °C) temperature drop. If extreme temperature variations are expected, recheck your tire pressure as necessary to keep them properly inflated.
- Tire inflation pressures may vary depending on changes in elevation. If driving in areas of higher or lower elevation, be sure to check and adjust for proper tire inflation.
- Do not exceed the maximum inflation pressure, as found on the sidewall of the tire(s).

# **Air Conditioning System**

Ite	Weight of volume	Classification		
Defrigorant	Heat pump	45.86±0.9 oz. (1300±25 g)	R-1234yf	
Refrigerant	Without heat pump	39.68±0.9 oz. (1125±25 g)	R-1234y1	
Compressed Libricant	Heat pump	9.70±0.35 oz. (275±10 g)	POE	
Compressor lubricant	Without heat pump	8.64±0.35 oz. (245±10 g)	POE	

Contact an authorized HYUNDAI dealer for more details.

## **Light Source**

	Light source	Source type	Specification	
	I I	High	LED	LED
	Headlight	Low	LED	LED
Front	Turn signal light, Parking light, Daytir light	me running	LED	LED
	Side repeater light (Side mirror)	LED	LED	
	Side marker	LED	LED	
	Front trunk	LED	LED	
	Stop light	LED	LED	
Rear	Tail light	LED	LED	
	Turn signal light	LED	LED	

	Light source	Source type	Specification
	Reverse light	LED	LED
	Side marker	LED	LED
	License plate light	LED	LED
	High mounted stop light	LED	LED
	Map lamp	LED	LED
	Personal lamp	LED	LED
	Vanity mirror lamp	LED	LED
Interior	Glove box lamp	LED	LED
menor	Two-way multi console lamp	LED	LED
	Mood lamp	LED	LED
	Cargo area lamp	LED	LED
	Room lamp	LED	LED

## **Recommended Lubricants and Capacities**

To help achieve proper vehicle performance and durability, use only lubricants of the proper quality.

These lubricants and fluids are recommended for use in your vehicle.



# **CAUTION**

Severe motor and reduction gear damage may result from the use of poor quality lubricants that do not meet HYUNDAI specifications. You must always use high quality lubricants that meet the specifications listed below.

	Classification	ī	Specifi	cations	Capacity
Reduction gear fluid	<del>2WD</del>	Rear			4.33-4.44 US qt. (4.1-4.2 l)
gear nuiu	AWD	Front	HK ATF 6	S SP4M-1	3.38-3.49 US qt. (3.2-3.3 ℓ)
		Rear			4.33-4.44 US qt. (4.1-4.2 ℓ)
Brake fluid			SAE J1704 DOT-4 LV, FMVSS 116 DOT-4, IS O4925 CLASS-6		As required
	Performance	ĀWD	without heat pump		21.08 US qt. (19.95 ₹)
	renomiance	(160kw+160kw)	with heat pump	Mixture of antifreeze and water  (Phosphate-based Ethylene glycol coolant	21.6 US qt. (20.44 ℓ)
Motor	Long	2WD (160kw)	without heat pump		20.62 US qt. (19.51 ₹)
coolant			with heat pump		21.27 US qt. (20.13 ℓ)
	Range	AWD (70kw+160kw)	without heat pump	Battery for aluminum radiator)	21.1 US qt. (19.97 ℓ)
			with heat pump		21.62 US qt. (20.46 ℓ)

## **Vehicle Load Limit**

Two labels on your driver's door sill show how much weight your vehicle was designed to carry: the Tire and Loading Information Label and the Certification Label.

Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, from the vehicle's specifications and the Certification Label:

#### **Base Curb Weight**

This is the weight of the vehicle including high voltage battery and all standard equipment. It does not include passengers, cargo, or optional equipment.

#### **Vehicle Curb Weight**

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

## Cargo Weight

This figure includes all weight added to the Base Curb Weight, including cargo curb weight and all payload.

## **Gross Axle Weight (GAW)**

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

#### Gross Axle Weight Rating (GAWR)

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the Certification Label. The total load on each axle must never exceed its GAWR.

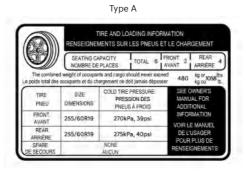
#### **Gross Vehicle Weight (GVW)**

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

### **Gross Vehicle Weight Rating (GVWR)**

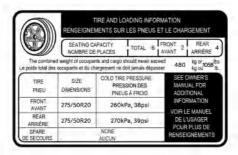
This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the Certification Label located on the driver's door sill.

## The Loading Information Label



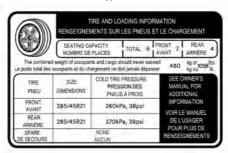
2C TireLabel 1

Type B



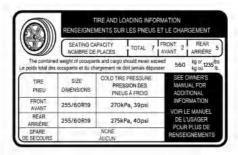
2C\_TireLabel\_2

Type C



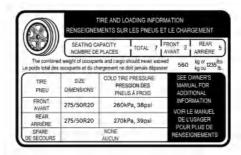
2C\_TireLabel\_3

Type D



2C\_TireLabel\_4

Type E



2C\_TireLabel\_5

Type F



2C TireLabel 6

The label located on the driver's door jamb shows the original tire size, cold tire pressures recommended for your vehicle, the number of people that can be in your vehicle and vehicle capacity weight.

## Vehicle capacity weight

- 6 persons: 1,058 lbs. (480 kg)
- 7 persons: 1,235 lbs. (560 kg)

Vehicle capacity weight is the maximum combined weight of occupants and cargo. If your vehicle is equipped with a trailer, the combined weight includes the tongue load.

# Seating capacity

- Total: 6 persons (Front seat: 2 persons, Rear seat: 4 persons)
- Total: 7 persons (Front seat: 2 persons, Rear seat: 5 persons)

Seating capacity is the maximum number of occupants including a driver that your vehicle may carry. However, the seating capacity may be reduced based upon the weight of all of the occupants, and the weight of the cargo being carried or towed. Do not overload the vehicle because there is a limit to the total weight, or load limit including occupants and cargo that the vehicle can carry.

# Towing capacity

· With brake system:

- 2WD: 3,500 lbs. (1,588 kg)
- AWD: 5,000 lbs. (2,268 kg)
- Without brake system:
  - 1,653 lbs. (750 kg)

Towing capacity is the maximum trailer weight including its cargo weight that your vehicle can tow.

## Cargo capacity

The cargo capacity of your vehicle increases or decreases depending on the weight, the number of occupants, and the tongue load, if your vehicle is equipped with a trailer.

## Steps for determining correct load limit

- 1. Locate the statement 'The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.' on your vehicle's placard.
- 2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- 3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
- 4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the 'XXX' amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 - 750 (5 x 150) = 650 lbs.)
- 5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- 6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.



#### WARNING

Do not overload the vehicle because there is a limit to the total weight, or load limit. including occupants and cargo that the vehicle can carry. Overloading may shorten the life of the vehicle. If the GVWR or the GAWR is exceeded, parts on the vehicle may break, and it may change the handling of your vehicle. These may cause you to lose control and result in a crash.

Example 1	Vehicle Capacity	2	**	+	
	Maximum Load (1400 lbs.) (635 kg)		Passenger Weight (150 lbs. × 2= 300 lbs.) (68 kg × 2= 136 kg)		Cargo Weight (1100 lbs.) (499 kg)

Example 2	Vehicle Capacity	ΛΙ	<b>* * * *</b>	+	
	Maximum Load (1400 lbs.) (635 kg)		Passenger Weight (150 lbs. × 5 = 750 lbs.) (68 kg × 5 = 340 kg)		Cargo Weight (650 lbs.) (295 kg)
Example 3	Vehicle Capacity	ΛΙ	<b>* * * *</b>	+	
	Maximum Load (1400 lbs.) (635 kg)		Passenger Weight (172 lbs. × 5 = 860 lbs.) (78 kg × 5 = 390 kg)		Cargo Weight (540 lbs.) (245 kg)

#### Certification label



2C CertificationLabel USA

The certification label is located on the driver's door sill at the center pillar and shows the maximum allowable weight of the fully loaded vehicle. This is called the GVWR. The GVWR includes the weight of the vehicle, all occupants, fuel, and cargo.

This label also tells you the maximum weight that can be supported by the front and rear axles, called GAWR.

The total weight of the vehicle, including all occupants, accessories, cargo, and trailer tongue load must not exceed the GVWR or the GAWR. To find out the actual loads on your front and rear axles, you need to go to a weigh station and weigh your vehicle. Be sure to spread out your load equally on both sides of the centerline.



#### WARNING

- Never exceed the GVWR for your vehicle, the GAWR for the front or rear axle and the vehicle capacity weight. Exceeding these ratings may affect your vehicle's handling and braking ability, and cause a collision.
- Do not overload your vehicle. Overloading your vehicle may cause heat buildup in your vehicle's tires, possible tire failure, increased stopping distances, and poor vehicle handling. All of which may result in a collision.
- If you carry items inside your vehicle (for example, suitcases, tools, packages, or anything else), they are moving as fast as the vehicle. If you have to stop or turn quickly, or if there is a collision, the items may cause an injury if they strike the driver or a passenger.
  - Put items in the cargo area of your vehicle. Try to spread the weight evenly.
  - Do not stack items like suitcases inside the vehicle above the top of the seats.
  - Do not leave an unsecured child restraint in your vehicle.
  - When you carry cargo inside the vehicle, secure it.

## **Vehicle Weight and Luggage Volume**

Gross vehicle weight    Ibs. (kg)						
	Long	Performance				
Item	2WD	ĀWD	ĀWD			
Gross weight	6,900 (3,130)	7,319 (3,320)	7,319 (3,320)			

Luggage volume cu ft. (ℓ)						
<u>Item</u>	2WD	ĀWD				
SAE (MIN.)	21.89 (620)					
SAE (MAX.)	86.94	(2462)				

#### **Available Front Trunk Volume**

2WD	AWD
3.11 cu ft. (88 ℓ)	1.84 cu ft. (52 ℓ)

Available front trunk volume depends on the specifications.

## Reference Weight and Distance when Towing a Trailer

The following table indicates the maximum trailer weight for your vehicle. Do not exceed the maximum allowable trailer weight. The maximum trailer weight includes the weight

of the trailer, any cargo, and equipment or items attached to the trailer. The towing load in excess of these limits can seriously affect vehicle steering and performance, and may damage the motor and drivetrain.

ltem		Long	Performance		
		2WD	AWD	AWD	
Maximum trailer weight lbs. (kg)	With brake system	3,500 (1,588) 5,000 (2,268)		5,000 (2,268)	
	Without brake system	1,653 (750)			
Maximum tongue weight *1 lbs. (kg)		350 (159)	500 (227)	500 (227)	

<sup>\*1:</sup> Tongue weight should be between allowable 10-15 %

Any additional weight, cargo, or accessories in your vehicle will reduce the maximum trailer weight and corresponding tongue load limits.

## **Vehicle Identifications**

## **Vehicle Identification Number (VIN)**



The VIN is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

The number is punched on the floor under the right front seat. To check the number, open the cover.



2C\_VINLabelPosition

The VIN is also on a plate attached to the top of the left side dashboard. The number on the plate can easily be seen through the windshield from outside.

#### **Vehicle Certification Label**



2C\_CertificationLabelPosition

The vehicle certification label attached on the driver's side center pillar gives the VIN.

## **Tire Specification and Pressure Label**



The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.

#### **Motor Number**





The motor numbers can be checked at the bottom of the vehicle.

# **Refrigerant Label**

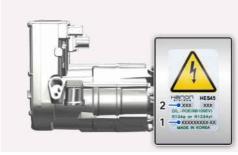


2C\_RefrigerantTypeLabel

- Caution/Flammable refrigerant/To require registered technician to service air conditioning system
- 2. Classification of refrigerant/Amount of refrigerant
- 3. Classification of Compressor lubricant

The refrigerant label provides information such as refrigerant type and amount. (R-1234yf) The air conditioning refrigerant label is located inside of the hood.

## **Air Conditioner Compressor Label**



2C\_AirconCompLabel

- 1. Refrigerant
- 2. Lubricating oil

A compressor label informs you the type of compressor your vehicle is equipped with such as model, supplier part number, production number, refrigerant and lubricating oil.

# **Operation In Foreign Countries**

If you are going to drive your vehicle in another country, be sure to:

• Observe all regulations regarding registration and insurance.

## **Vehicle Data Collection And Event Data Recorders**

This vehicle is equipped with an Event Data Recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating;
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
- · How fast the vehicle was traveling.

This data can help provide a better understanding of the circumstances in which crashes and injuries occur.

EDR data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the EDR under normal driving conditions and no personal data (for example, name, gender, age, and crash location) is recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

# **Reporting Safety Defects**

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying HYUNDAI MOTOR AMERICA.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free

at 1-888-327-4236 (TTY: 1-800-424-9153);

go to http://www.safercar.gov;

download the SaferCar mobile application;

or write to: Administrator, NHTSA

1200 New Jersey Ave, SE,

West Building Washington, D.C. 20590.

You can also obtain other information about motor vehicle safety from

http://www.safercar.gov.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or HYUNDAI MOTOR AMERICA.

#### **FCC Statement**

The following regulatory statement applies to all Radio Frequency (RF) devices equipped in this vehicle:

This device complies with Part 15 of the FCC Rules and with Innovation, Science and Economic Development Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Le present appareil est conforme aux CNR d'Innovation, Science and Economic Development applicables aux appareils radio exempts de

licence. L'exploitation est autorisee aux deux conditions suivantes:

- 1. l'appareil ne doit pas produire de brouillage, et
- 2. l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

La operacion de este equipo esta sujeta a las siguientes dos condiciones:

- 1. es posible que este equipo o dispositivo no cause interferencia perjudicial y
- 2. este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operacion no deseada.

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Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

# **Consumer Information**

This consumer information has been prepared in accordance with regulations issued by the National Highway Traffic Safety Administration of the U.S. Department of Transportation. Your HYUNDAI dealer will help answer any questions you may have as you read this information.

HYUNDAI motor vehicles are designed and manufactured to meet or exceed all applicable safety standards.

For your safety, however, we strongly urge you to read and follow all directions in this Owner's Manual, particularly the information under the headings NOTICE, CAUTION, and WARNING.

If, after reading this manual, you have any questions regarding the operation of your vehicle, please contact the Hyundai Customer Care Center:

Hyundai Customer Care

P.O. Box 20850

Fountain Valley, CA 92728

800-633-5151

consumeraffairs@hmausa.com

Hyundai's Customer Care Center representatives are available Monday through Friday, between the hours of 6:00 AM and 5:00 PM PST and Saturday between 6:30 AM and 3:00 PM PST (English).

For Customer Care assistance in Spanish or Korean, representatives are available Monday through Friday between 6:30 AM and 3:00 PM PST.

# **Open Source Software Notice**

This vehicle contains software with open source licenses.

Open source software information including the source code, copyright notices and referred license terms may be obtained on the website.

https://www.hyundai.com/worldwide/opensource

HYUNDAI Motor Company will provide the open source code to you in storage medium such as CD-ROM for minimum charge covering the cost of performing source distribution upon email request to opensource@hyundai.com within a period of 3 years from the date of product purchase.