HYUNDAI

# 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 HYUNDAI models 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 U.S. Department of Transportation and other federal or state agencies.

## TWO-WAY RADIO INSTALLATION

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, we recommend that you carefully follow the radio manufacturer's instructions if you choose to install one of these devices.

## SAFETY AND VEHICLE DAMAGE WARNING

This manual includes information titled as DANGER, WARNING, CAUTION and NOTICE.

These titles indicate the following:

**⚠ DANGER**

**DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.**

**⚠ WARNING**

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

**⚠ CAUTION**

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

***NOTICE***

**NOTICE indicates a situation which, 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
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.

# INTRODUCTION

Congratulations, and thank you for choosing HYUNDAI. We are pleased to welcome you to the growing number of discerning people who drive HYUNDAIs. 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. HYUNDAI dealers are prepared to provide high-quality service, maintenance and any other assistance that may be required.

This 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. The manual should stay with the vehicle if you sell it to provide the next owner with important operating, safety and maintenance information.

# HYUNDAI MOTOR AMERICA

**⚠ CAUTION**

**Severe vehicle 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 on Page 8-6 in the Vehicle Specifications section of the Owner's Manual.**

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# GUIDE TO HYUNDAI GENUINE PARTS

**1. What are HYUNDAI Genuine Parts?**

HYUNDAI Genuine Parts are the same parts used by HYUNDAI Motor Company to manufacture vehicles. They are designed and tested for the optimum safety, performance, and reliability for our customers.

**2. Why should you use 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.

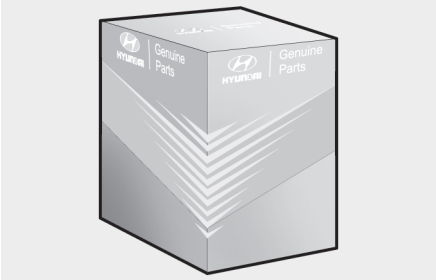
In addition, any damage to or failure of HYUNDAI Genuine Parts caused by the installation or failure of an imitation, counterfeit or used salvage part is not covered by any HYUNDAI Warranty.

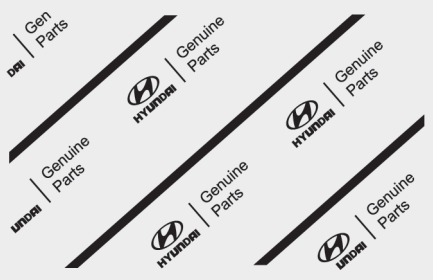
**3. How can you tell if you are purchasing HYUNDAI Genuine Parts?**

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.



## HOW TO USE THIS MANUAL

We want to help you get the greatest possible driving pleasure from your vehicle. Your Owner's Manual can assist you in many ways. To gain an overview of the contents of your Owner's Manual, use the Table of Contents in the front of the manual. The first page of each Chapter includes a detailed Table of Contents of the topics in that Chapter.

To quickly locate information about your vehicle, use the Index in the back of the manual. It is an alphabetical list of what is in this manual and the page number where it can be found.

For your convenience, we have incorporated tabs on the right-hand page edges. These tabs are coded with the Chapter titles to assist you with navigating through the manual.

## SAFETY MESSAGES

Your safety, and the safety of others, is 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, as well as damage to 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 DANGER, WARNING, CAUTION, NOTICE and the SAFETY ALERT SYMBOL will be used.

This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death. The safety alert symbol precedes the signal words DANGER, WARNING and CAUTION.

**⚠ DANGER**

**DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.**

**⚠ WARNING**

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

**⚠ CAUTION**

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

***NOTICE***

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

## FUEL REQUIREMENTS

For the optimal vehicle performance, we recommend you to use the hydrogen fuel which complies with your local regulatory agency standard (purity, maximum concentration of impurities, etc.).

## VEHICLE MODIFICATIONS

- This vehicle should not be modified. Modification of your vehicle could affect its performance, safety or durability and may even violate governmental safety and emissions regulations.

  In addition, damage or performance problems resulting from any modification may not be covered under warranty.
- 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.

**⚠ WARNING**

**CALIFORNIA PROPOSITION 65 WARNING**

**Items contained in motor vehicles or emitted from them are known to the State of California to cause cancer and birth defects or reproductive harm. These include:**

- **Gasoline and its vapors**
- **Engine exhaust**
- **Used engine oil**
- **Interior passenger compartment components and materials**
- **Component parts which are subject to heat and wear**

**In addition, battery posts, terminals and related accessories contain lead, lead compounds and other chemicals known to the State of California to cause cancer and reproductive harm.**

## 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.**

**These data can help provide a better understanding of the circumstances in which crashes and injuries occur. NOTE: EDR data are recorded by your vehicle only if a non-trivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are 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.**

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# FCEV Vehicle System Overview

**FCEV : Fuel Cell Electric Vehicle**


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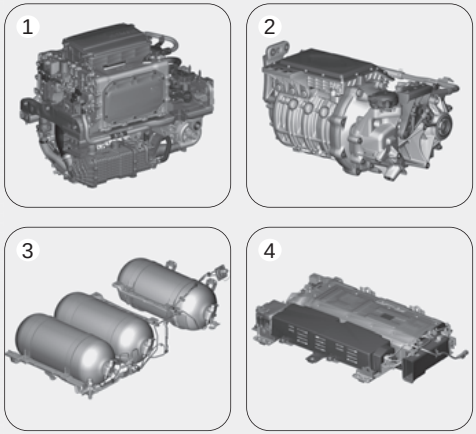
## INTRODUCTION OF FCEV

An FCEV is an electric vehicle which is driven using the electricity generated from the fuel cell.
The power system of the FCEV is composed of the following:
- The fuel cell stack which generates the electricity
- The device which controls the heat generated after supplying the hydrogen and air for chemical reaction of the stack
- The inverter which converts the DC created from the stack to AC
- The traction motor which generates propelling power using the supplied AC
- Air processing system
- Fuel processing system

The hydrogen tanks that stores the hydrogen supplied to the fuel cell can be fueled at 70 MPa.

❊ FCEV is Fuel Cell Electric Vehicle

# THE COMPONENTS OF FCEV




(1) Fuel Cell system
(2) Traction motor system
(3) Hydrogen Tanks
(4) Battery System

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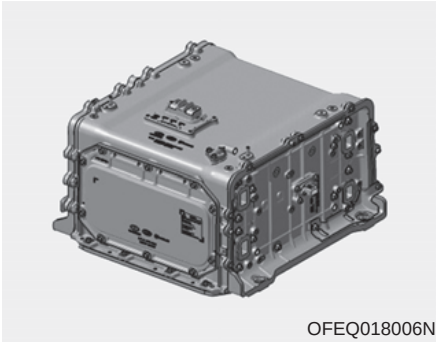
## 1. Fuel cell stack



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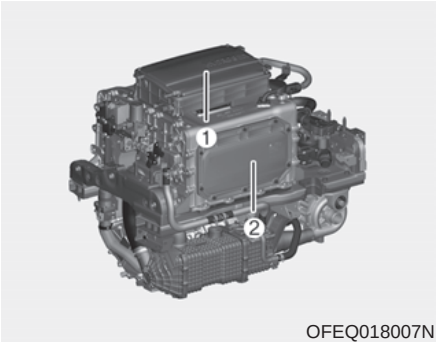
A fuel cell stack is a device that converts the chemical energy into electricity thorough a chemical reaction with hydrogen and oxygen. Fuel cell is different from battery in that it requires hydrogen and oxygen constantly in order to operate. And it can produce electricity continually for as long as hydrogen and oxygen are supplied. A fuel cell stack is composed of many unit cells to obtain the desired power for a vehicle.

## 2. FCEV powertrain

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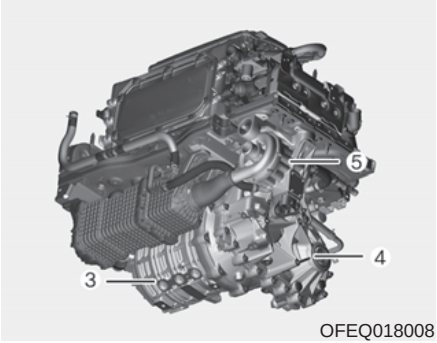


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1. High voltage junction box
2. Fuel cell stack
3. Traction motor
4. Reduction gear
5. Air compressor

The main components of FCEV are Fuel cell stack, air processing system, fuel processing system, thermal management system, hydrogen storage tanks, high voltage battery, DC-DC converter, inverter and traction motor, gear differential unit.

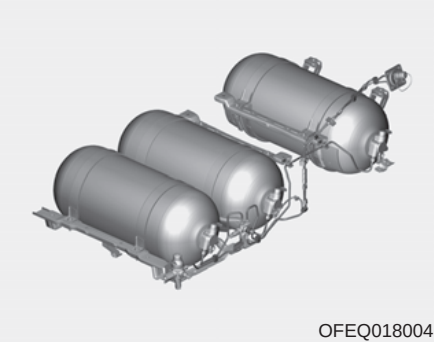
The Air compressor supplies air to fuel cell system and the hydrogen storage tanks supplies hydrogen fuel to fuel cell system. Then the electric energy comes from the fuel cell system.

The electric energy delivered to the motor inverter. The energy finally moves to motor operating.

**⚠ WARNING**

**If you assemble or disassemble the stack and fuel cell system, hydrogen may leak resulting in fire and this may lead to accidents. Never assemble or disassemble the stack and fuel cell system.**

## 3. High pressure hydrogen storage tanks



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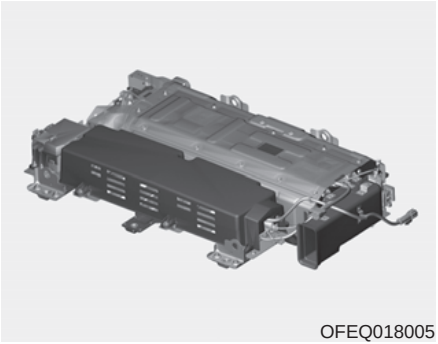
Compressed hydrogen tank system is composed of three tanks which are filled with hydrogen gas in a gas station. Each tank is made of plastic liner for blocking the hydrogen permeation and carbon fiber layer sustain high pressures.

There are main parts to supply hydrogen stably and to enable safety such as magnetic valves, pressure regulator, pressure sensors, pressure relief valve, excess flow valve and so on. The hydrogen in the tanks comes into the pressure regulator which has a pressure sensor.

## 4. Battery system



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A 12 V battery integrated with the low and high voltage batteries is installed in the vehicle. The battery supplies the electricity required for driving the vehicle and stores the energy generated from the regenerative braking. When the vehicle accelerates the auxiliary power of the fuel cell supplies the energy. The vehicle can drive about 2 miles (3 km) in EV mode until the high voltage battery is discharged.

### *High voltage cables*

The electric energy which is generated from fuel cell system or high voltage battery module is distributed to the various components. Most of the cables are located in the inside or bottom of the components. These cables use orange colored cover to distinguish from other lines. It is required to handle the cables carefully with isolation gloves.

### *Disconnecting negative (-) battery cable*

1. Fold up the luggage board of the liftgate.
2. Disconnect the negative (-) connector.

### *Hydrogen gas detection sensors*

They detect a hydrogen leak and informs a warning of hydrogen leak to a driver. As informing a warning, the sensors automatically shut off hydrogen. Sensors are installed around the hydrogen storage tanks and FCEV system module.

These sensors prevent a hydrogen leak in an emergency. Even if the hydrogen leak occurs, the Fuel cell electric operating does not active. The system operating is changed to EV (Electric vehicle) mode and you may drive the vehicle about 2 miles (3 km). However, we recommend that you stop the vehicle to the safety place and contact an authorized HYUNDAI dealer.

**⚠ WARNING**

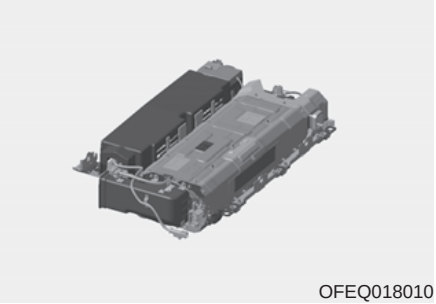
**Never touch orange or high voltage labeled components including wires, cables, and connections.**

**If the insulators or covers are damaged or removed, severe injury or death from electrocution may occur.**

**⚠ WARNING**

**In the fuel cell system, the battery uses high voltage to operate the motor and other components.**

**This high voltage battery system can be very dangerous. Never touch the system. If you touch the battery system, serious injury or death may occur.**



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**⚠ WARNING**

- **Do not disassemble or assemble the high voltage battery system. Doing so may result in electric shock causing death or serious injury.**
- **If you disassemble or assemble system components improperly, it may damage the performance and reliability of your vehicle.**
- **If coolant and electrolyte come in contact with your body, clothes or eyes, immediately flush with a large quantity of fresh tap water. Have your eyes examined by a doctor as soon as possible.**

**⚠ WARNING**

**Never assemble or disassemble the high voltage battery system.**

- **If you assemble or disassemble the high voltage battery system, the durability and performance of the vehicle may be damaged.**
- **When you want to check the high voltage battery system, contact an authorized HYUNDAI dealer.**
- **Do not touch the high voltage battery and high voltage cable connected to motor (orange color). Severe burns and electric shock may occur. For your safety, do not touch the cover of electronic components and electronic cable. Do not remove the cover of electronic components and electronic cable. In particular, never touch the high voltage battery system when the FCEV system is operating. It may result in death or serious injury.**

**⚠ WARNING**

- **Never use the package modules (high voltage battery, inverter, converter) for any other purpose.**
- **Do not use an after-market battery charger to charge the high voltage battery. Doing so may result in death or serious injury.**
- **Never get near or put a high voltage battery system in a fire. Doing so may result in serious burns.**
- **Never drill into, strike or otherwise damage the package modules. An electric shock may occur resulting in serious injury or death.**

**⚠ CAUTION**

- When the vehicle is paint baked, do not pass 30 minutes in 158°F (70°C) or 20 minutes in 176°F (80°C) degree.
- When you clean the fuel cell power module compartment, do not wash using water. Water may cause an electric shock to occur and damage electronic parts and components.

**⚠ WARNING**

This vehicle uses the high voltage battery system to generate high voltage.

High voltage in the battery system is very dangerous and can cause severe burns and electric shock. This may result in serious injury or death.

- For your safety, never touch, replace, dismantle or remove the high voltage battery system including components, cables and connectors.

  Severe burns or electric shock may result in serious injury or death if you do not follow this warning.
- When the high voltage battery system operates, the battery system can be hot. Always be careful because burns or electric shock may be caused by high voltage.
- Do not drop water or liquid on to Fuel cell power module compartment. The system components are covered. If you drop water or liquid on to system components, it may result in electric shock.

**⚠ WARNING**

- Do not assemble or disassemble the hydrogen tanks. Improper work may damage the performance and reliability and unexpected problem may occur. For hydrogen tanks work, contact an authorized HYUNDAI dealer.
- Never drill into, strike or otherwise damage the hydrogen tanks. Unexpected problem may occur resulting in serious injury and death.
- Never get near or put a hydrogen tanks in a fire. Doing so may result in big injury.
- Never use the hydrogen tank for any other purpose.

### *Service plug*

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**⚠ WARNING**

**Never touch the service plug under the rear seat.**

**The service plug is attached to the high voltage battery system.**

**Touching the service plug will result in death or serious injury.**

**Service personnel should follow procedures in service manual.**

**⚠ CAUTION**

**The FCEV system contains many electronic components. High voltage components like cables and other parts may emit electromagnetic waves. Even if the electromagnetic cover blocks electromagnetic emissions, electromagnetic waves may have an effect on electronic appliances. If you park the vehicle for a long time, the high voltage battery or 12V battery will discharge. You need to drive the vehicle several times per month. We recommend driving at least 10 minutes or 2 miles (3 km) when you drive the vehicle.**

**If the high voltage battery is discharged and if it is impossible to jump start the vehicle contact your HYUNDAI dealer.**

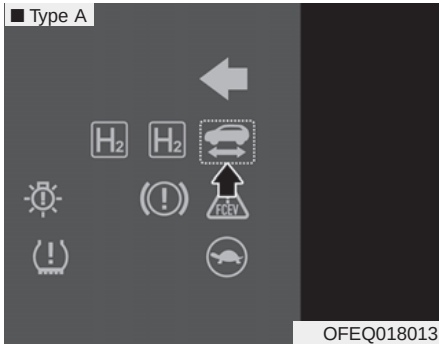
**⚠ WARNING**

- **When you start the FCEV system in the "P" or "N" gear position, the "Ready ( )" indicator is illuminated in the cluster. The driver can drive the vehicle.**
- **When you leave the vehicle, you should turn off the system or shift into the "P" position. If you depress the accelerator pedal by mistake and the vehicle is not in the "P" position, the vehicle will move abruptly. This may result in serious injury or death.**

## How to Start the Vehicle

1. Holding the smart key, sit in the driver's seat.
2. Fasten the seat belt before starting the vehicle.
3. Make sure to engage the parking brake.
4. Turn OFF all electrical devices.
5. Make sure to depress and hold the brake pedal.
6. While depressing the brake pedal, shift to P (Park).
7. Depress and hold the brake pedal while pressing the POWER button.

■ Type A

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■ Type B

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8. When the "🚗" indicator is ON, you can drive the vehicle.

   When the "🚗" indicator is OFF, you cannot drive the vehicle. Start the vehicle again.
9. Depress and hold the brake pedal and shift to the desired position.

### Information

**While the charging cable is connected, the gear cannot be shift from P (Park) to any other gear for safety reasons.**

10. Release the parking brake and slowly release the brake pedal. Check if the vehicle slowly moves forward, then depress the accelerator pedal.

## How to Stop the Vehicle

1. Hold down the brake pedal while the vehicle is parked.
2. While depressing the brake pedal, shift to P (Park).
3. While depressing the brake pedal, engage the parking brake.
4. While depressing the brake pedal, press the Power button and turn off the vehicle.
5. Check if the "" indicator is turned OFF on the instrument cluster.

   When the "" indicator is ON and the gear is in a position other than P (Park), the driver can accidently depress the accelerator pedal, causing the vehicle to move unexpectedly.

## Virtual Engine Sound System

The Virtual Engine Sound System generates engine sound for pedestrians to hear vehicle sound because there is no sound while the FCEV vehicle is operating.

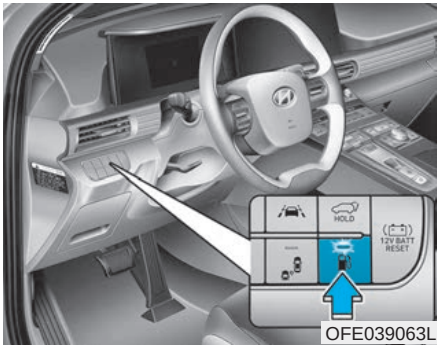
- If the vehicle is in the ready ( ) mode and the gear is not in P (Park),
- When the gear is shifted to R (Reverse), an additional warning sound will be heard.

### ⚠ CAUTION

- **The vehicle is much quieter while driving than a conventional gasoline-powered vehicle. Be aware of your surroundings and always drive safely.**
- **After you park the vehicle or while you are waiting at a traffic light, check whether there are children or obstacles around the vehicle.**
- **Check if there is something behind the vehicle when driving in reverse. Pedestrians may not hear the sound of the vehicle.**

## Fuel filler door

### *Opening the fuel filler door*



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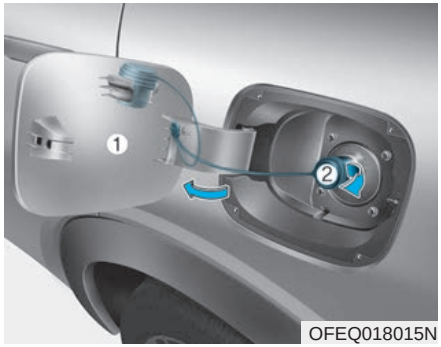
1. Turn the vehicle off.
2. Push the fuel filler door opener button.

**NOTICE**

- **The fuel filler door does not open if the vehicle is not off.**
- **The fuel filler door may open after several seconds from turning off the vehicle. However, in cold weather, the fuel door may not open for about 45 seconds until the cluster message "Powering down..." disappears. This is for protecting the fuel cell system.**



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3. Pull the fuel filler door (1) out to fully open.
4. Pull the fuel filler cap (2).
5. Place the cap on the fuel filler door.

### Information

If the fuel filler door does not open because ice has formed around it, tap lightly or push on the door to break the ice and release the door. Do not pry on the door. If necessary, spray around the door with an approved de-icer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.

**WARNING**

- **According to the hydrogen fueling station condition the hydrogen may not be filled fully and the driving distance may change accordingly. The hydrogen may not be charged fully if the fueling station does not satisfy the fueling method specified in the fueling. standard (SAE J2601) or if the hydrogen is not enough in the station, the fueling facility has failure, etc.**
- **Depending on the remaining hydrogen in the vehicle and ambient temperature, the time required for fueling may vary. More time may be required for fueling if the remaining hydrogen level is low and the weather is hot. Also, required time may be longer if the hydrogen cooling temperature of the fueling station is high.**
- **The distance to empty may vary depending on the driving environment (weather, traffic, etc.) and driving method (rapid acceleration, heating and air conditioning, etc.).**

### *Closing the fuel filler door*

1. Cover the fuel filler with the cap.
2. Close the fuel filler door until it is latched securely.

**WARNING**

- **If the fuel filler cap requires replacement, use parts for replacement from an authorized Hyundai dealer. An incorrect fuel filler cap can result in a serious malfunction of the fuel system. Contact an authorized HYUNDAI dealer for replacement.**
- **If the fuel filler door is not completely closed, the vehicle is not turned on. Close the fuel filler door and turn on the vehicle.**

**⚠ WARNING**

**Refueling dangers**

**Automotive fuels are flammable materials. When refueling, please note the following guidelines carefully. Failure to follow these guidelines may result in severe personal injury, severe burns or death by fire or explosion.**

- **Read and follow all warning posted at the gas station facility.**
- **Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.**
- **Do not get back into a vehicle once you have begun refueling since you can generate static electricity by touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must re-enter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source.**
- **Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire.**
- **When refueling, always shut the power off. Once refueling is complete, check to make sure the fuel filler cap and fuel filler door are securely closed, before starting the vehicle.**
- **DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle while at a gas station especially during refueling. Automotive fuel is highly flammable and can, when ignited, result in fire.**
- **If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station and then contact the local fire department. Follow any safety instructions they provide.**

## Warning and indicator lights

■ Type A

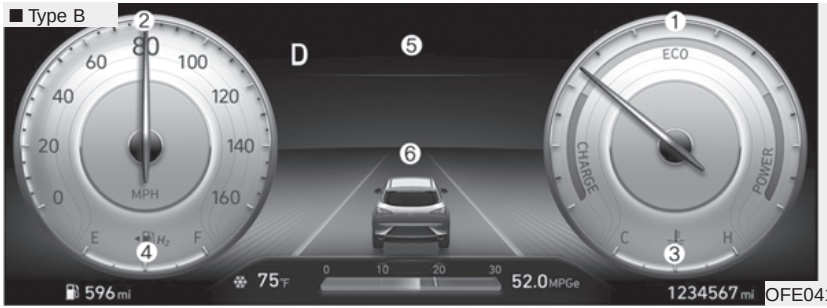
1. Power gauge
2. Speedometer
3. Fuel cell stack temperature gauge
4. Fuel gauge
5. Odometer/Cluster display/ Trip computer
6. Warning and indicator lights

OFE048100N

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Air bag warning | | Charging system warning | OFF | Electronic Stability Control (ESC) OFF indicator | | Forward Safety warning |
| | Seat belt warning | | Low fuel level warning | | Immobilizer Indicator | | |
| Red | Parking brake & brake fluid warning | | Low tire pressure warning | | Turn Signal Indicator | EPB | Electronic Parking Brake (EPB) warning |
| Yellow | Regenerative brake warning | FCEV | Service warning | | High Beam Indicator | AUTO HOLD | AUTO HOLD Indicator |
| ABS | Anti-lock brake system (ABS) warning | | Power down warning | | Light ON Indicator | | Master Warning |
| ABS | Electronic Brake force Distribution (EBD) warning | $H_2$ | Hydrogen gas leak warning (Red) | | Ready indicator | | LED Headlight warning |
| | | $H_2$ | Hydrogen leak sensor warning (Yellow) | | Lane Safety indicator | | Rear fog indicator |
| | Motor Driven Power Steering (MDPS) warning | | Electronic Stability Control (ESC) indicator | | | | |

❊ For more details, refer to the ‘Instrument cluster’ in Chapter 3.

■ Type B




OFE041480N

1. Power gauge
2. Speedometer
3. Fuel cell stack temperature gauge
4. Fuel gauge
5. Warning and indicator lights
6. Odometer/Cluster display/ Trip computer

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Air bag warning | | Charging system warning | OFF | Electronic Stability Control (ESC) OFF indicator | | Forward Safety warning |
| | Seat belt warning | | Low fuel level warning | | Immobilizer Indicator | | |
| BRAKE | Parking brake & brake fluid warning | | Low tire pressure warning | | Turn Signal Indicator | EPB | Electronic Parking Brake (EPB) warning |
| Yellow | Regenerative brake warning | FCEV | Service warning | | High Beam Indicator | AUTO HOLD | AUTO HOLD Indicator |
| ABS | Anti-lock brake system (ABS) warning | | Power down warning | | Light ON Indicator | | Master Warning |
| ABS | Electronic Brake force Distribution (EBD) warning | H2 | Hydrogen gas leak warning (Red) | | Ready indicator | | LED Headlight warning |
| BRAKE | | H2 | Hydrogen leak sensor warning (Yellow) | | Lane Safety indicator | | |
| | Electric Power Steering (EPS) warning | | Electronic Stability Control (ESC) indicator | | | | |

❊ For more details, refer to the 'Instrument cluster' in Chapter 3.

## Cluster Display Messages

### ▶ Check FCEV System

This warning message is displayed and the warning light illuminates when the FCEV system is not working properly.

In this case,have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Power limited due to high coolant temperature

This warning message is displayed when the FCEV's stack is overheated and the power supply to the FCEV system is limited.

If the warning light stays on when in "Ready ( )" state or while driving the vehicle, this indicates that the fuel cell stack may have failure. In this case, we recommend you to drive safely and have your vehicle inspected by an authorized HYUNDAI dealer.

**⚠ CAUTION**

**Do not drive on uphill or accelerate suddenly when the power down warning light is on. The power is limited and may result in dangerous situation or vehicle damage.**

### ▶ Replace fuel cell coolant and filter

This warning message is displayed when the fuel cell coolant and filter need to be checked.

In this case, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Refill electric components coolant

This warning message is displayed when the electronic device's coolant level in the tanks is low.

In this case, have the vehicle checked by an authorized HYUNDAI dealer and refill the coolant.

### ▶ Stop vehicle and check power supply

This warning message is displayed when any serious malfunction of the vehicle is detected.

In this case, drive the vehicle immediately to a safe area and turn off the vehicle. Then turn the vehicle on again.

If the message is displayed again, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Close fuel door before turning vehicle On

This warning message is displayed when you turn on the vehicle with the fuel filler door open. Close the fuel filler door and turn on the vehicle again.

### ▶ Hydrogen tank overfilled due to hydrogen station error

This warning message is displayed when the hydrogen tank is over-refueled with the hydrogen due to a problem of the fueling station.

Turn off the vehicle and then turn on the vehicle. If the message is displayed again, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Small hydrogen leak possible

This warning message is displayed when the minor hydrogen leakage is detected in the vehicle. In this case, have the vehicle checked by an authorized HYUNDAI dealer.

If the vehicle has to be stopped due to the leakage, hydrogen gas leak warning light (red) will illuminate and 'Hydrogen leak detected. Stop safely immediately.' message is displayed.

### ▶ Power limited due to low hydrogen tank temperature

This warning message is displayed to protect the battery and fuel cell system when the temperature of the hydrogen tanks is low.

If this message is still displayed after the ambient temperature has increased enough, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Hydrogen tank temperature out of range! Stop safely immediately

This warning message is displayed to protect the hydrogen tank system when the temperature of the hydrogen tank is too high or too low.

Turn off the vehicle and stop to let the temperature of the hydrogen tank go down.

**⚠ WARNING**

**If this message is still displayed after the vehicle is turned off and stopped for a sufficient time, we recommend you to stop driving and have your vehicle immediately inspected by an authorized HYUNDAI dealer.**

### ▶ Hydrogen leak detected. Stop safely immediately

This warning message is displayed and the hydrogen gas leak warning light (red) illuminates when the hydrogen leakage is detected in the vehicle. In this case, we recommend you to stop driving and stop the vehicle immediately at a safe area. Then turn off the vehicle and have your vehicle inspected by an authorized HYUNDAI dealer.

### ▶ Check hydrogen leak sensor

This warning message is displayed and the light showing the malfunction of the hydrogen leakage detection sensor illuminates when there is a malfunction with the hydrogen leakage detection sensor. In this case, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Refueling…

This warning message is displayed while refueling the vehicle. Do not turn on the vehicle and wait until the refueling is complete.

### ▶ Check fuel door sensor

This warning message is displayed when there is a malfunction with the sensor located below the fueling inlet which is used for communicating with the fueling station. Check and remove if there is any foreign substance around the fueling inlet.

If this message is still displayed after the foreign substance is removed, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Open fuel door after turning vehicle Off

This warning message is displayed when you try to open the fuel filler door while the vehicle is turned on.

Turn of the vehicle and open the fuel filler door. If the message is still displayed after a while, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Replace hydrogen tank. Maximum number of refill cycles exceeded

This warning message is displayed when the number of times refueling the vehicle exceeds the predefined number (4,995 times). The fuel cell system stops operation for safety even if the vehicle is refueled enough and when there is no problem with the vehicle. In this case, have the hydrogen storage system replaced by an authorized HYUNDAI dealer.

### ▶ Power limited due to fuel cell system error

This warning message is displayed when there is a malfunction with the fuel cell system and the power supply to the fuel cell system is limited.

If the warning light stays on when in "Ready ( )" state or while driving the vehicle, this indicates that the fuel cell system may have failure. In this case, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Check fuel cell system! Stop safely immediately

This warning message is displayed when any serious malfunction of the fuel cell system is detected.

In this case, immediately park the vehicle at a safe area and turn off the vehicle. Then turn the vehicle on again.

If the message is displayed again, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Unable to start vehicle! Check high voltage system

This warning message is displayed when there is a malfunction with the high voltage system.

If the vehicle will not turn on, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Unable to start vehicle. Hydrogen too low

This warning message is displayed when the fuel is empty and the vehicle is not turned on. The vehicle will not turn on and we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### ▶ Check FCEV System! Stop and turn vehicle Off

This warning message is displayed when there is a temporary malfunction with the FCEV system. Stop the vehicle at a safe area and turn off the vehicle. Then turn on the vehicle after a while. If the message is displayed again, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Check 12V battery. Stop safely and engage parking brake

This warning message is displayed when the voltage of the auxiliary battery is low. Stop the vehicle at a safe area and turn off the vehicle. Then turn on the vehicle after a while. If the message is displayed again, have the vehicle checked by an authorized HYUNDAI dealer.

### ▶ Low fuel

This warning message is displayed when you need to refuel the vehicle. Refuel the vehicle immediately at a nearby fueling station.

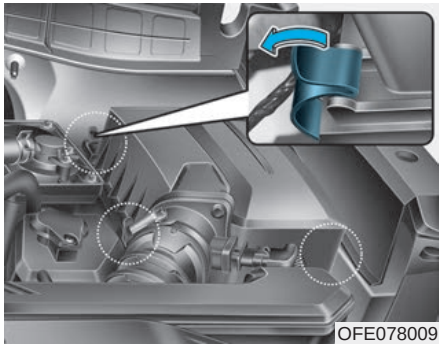
▶ **Air filter blocked. Check filter or see owner's manual**

This warning message is displayed when

- the snow may block the air cleaner filter after driving the vehicle in heavy snow when the ambient temperature is below 50°C (10°F) or
- the exhaust pipe may be frozen and clogged when the vehicle is parked for a long time with the vehicle ON below 50°C (10°F).

In this case, remove the snow from the inside of the air cleaner filter and turn on and off the vehicle. If the warning message is displayed again, the exhaust pipe may be blocked. Then, move your vehicle indoors and leave it inside more than one day to defrost the exhaust pipe.

If the warning message is displayed again, have the vehicle checked by an authorized HYUNDAI dealer.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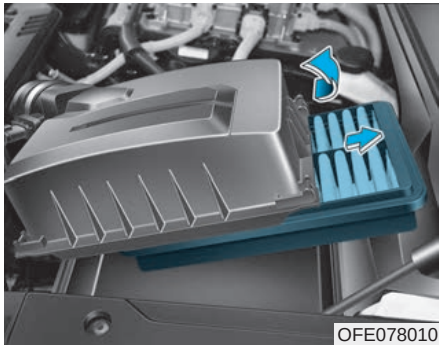
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## FCEV mode

### *Entering FCEV Mode*

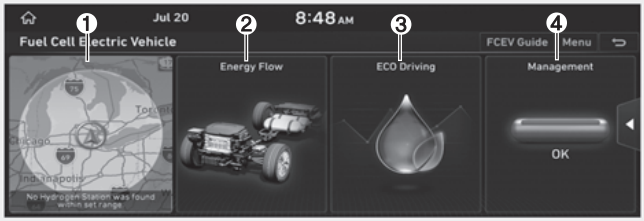
OFEQ018017N

OFEQ018018N

If you select the "FCEV" menu in the Infotainment system home screen or the "FCEV" in the menu, you can enter the FCEV mode.

For details on FCEV Mode, refer to the navigation manual that is provided separately.

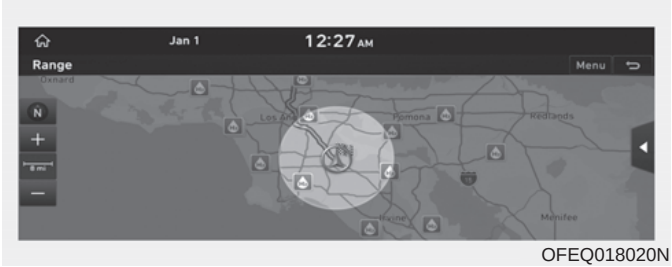
### *FCEV Mode Menu Screen*




OFEQ018019N

1. Reachable Range: It shows the reachable range on the map.
2. Fuel cell monitoring: It shows the battery information and the power transmission flow between the components.
3. ECO Driving: It shows the fuel efficiency information and environmental contribution.
4. Management : It shows the status of hydrogen tank (warning alert) and 'FCEV Route' setting.

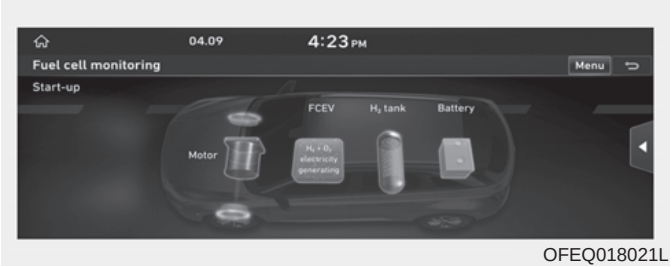
### *Reachable Range*




OFEQ018020N

You can check the reachable range on the screen

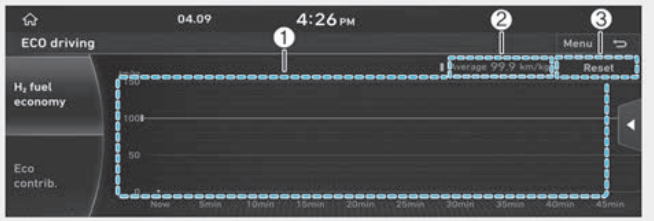
### *Fuel cell monitoring*




OFEQ018021L

You can check the FCEV's Start-up status, battery information and power transmission flow between the components.

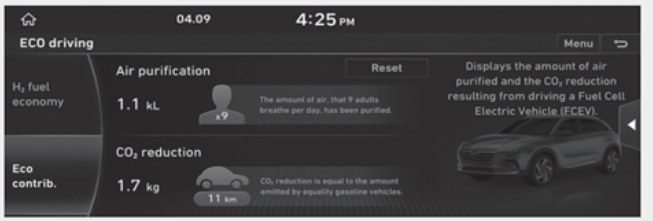
### *Hydrogen fuel economy*




OFEQ018022L

1. Fuel Efficiency Graph: It shows fuel efficiency information of the last 45 minutes.
2. Average Fuel Efficiency (MPGe): It shows the average fuel efficiency.
3. Initialization: It initializes the fuel efficiency graph information.

### *ECO contribution*




OFEQ018023N

You can check the amount of purified air and CO2 reduction rate.

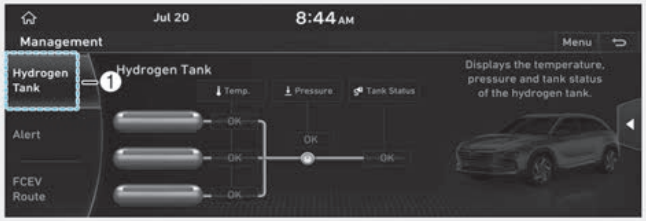
- Air purification

  It shows the amount of air that adult(s) breathe(s) per day is purified

- CO2 reduction

  It shows that the same amount of CO2 exhausted by an equal class gasoline vehicle is reduced.

### *Management*




OFEQ018024N

OFEQ018025N

OFEQ018026N

1. Hydrogen Tank : It shows the temperature, pressure and status of the hydrogen tank while driving.
2. Warning [Destination unreachable warning]

   You can set to have the warning pop up when the vehicle cannot reach the destination with the current remaining hydrogen fuel.
3. FCEV Route [Display FCEV Route Bar on Map]

   You can set to indicate the FCEV route and reachable range on the map screen.

## When the high voltage battery is weak

When the high voltage battery is weak due to driving on a hill for a long time or accelerating and decelerating the vehicle repeatedly, the acceleration performance may be lower than usual. In this case, be cautious not to overtake other vehicles.

## If the 12 volt battery is discharged

This vehicle does not have a regular 12V battery that needs periodic replacement. It is lithium ion polymer type integrated into the high voltage battery. The vehicle has a 12V battery protection system that cuts 12V battery from vehicle draw to prevent full discharge.

If the 12V battery is discharged, you should try charging it by pressing the "12V BATT RESET" button.

### *Using the 12V battery reset switch*

OFEQ019028L

1. Press the 12V Battery Reset switch to reconnect the 12V battery.
2. Start the vehicle within 15 seconds of pressing the 12V Battery Reset switch.
3. After starting vehicle ( indicator on), move the vehicle outside and keep the vehicle ready ( ) mode more than 30 minutes safely to charge the 12V battery.

If you do not start the vehicle immediately after pressing the 12V Battery Reset switch, the power of 12V battery is automatically disconnected after few seconds to save the 12V battery from additional discharge. If the 12V battery is disconnected prior to starting the vehicle, press the 12V Battery Reset switch again and then immediately start the vehicle as explained.

Repeated use of the 12V Battery Reset switch without a sufficient ON cycle (30 Min+) may cause over discharge of the 12V battery, which will prevent the vehicle from starting. If the 12V battery is over discharged to a point that the reset does not work, try to jump-start the vehicle.

### Information

**After starting the vehicle ( indicator on), the 12V battery is being charged whether the accelerator pedal is depressed or not.**

**❋ For more details regarding the jump start, refer to the 'Jump staring' in Owner's manual Chapter 6.**

## Emergency while driving

### *If an accident occurs*

1. Stop the vehicle, put the gear into the P (Park) position, set the parking brake, and turn the vehicle off to prevent the hydrogen and current from leaking.

   The flow of hydrogen into the fuel cell stack will be shut off to prevent the current from being generated.
2. Evacuate to the safety place.
3. Call emergency services for help and let them know the vehicle is a Fuel Cell Electric Vehicle.

### *If a fire occurs*

1. Stop the vehicle, put the gear into the P(Park) position, set the parking brake, and turn the vehicle off to prevent the hydrogen and current from leaking.

   The flow of hydrogen into the fuel cell stack will be shut off to prevent the current from being generated.
2. If the fire is small, which can be extinguished with fire extinguisher, use carbon dioxide extinguisher. You can also extinguish the fire with water when the vehicle power is turned off.

**⚠ WARNING**

**Do not use water to extinguish a fire when the vehicle power is turned on. Serious electric shock may result.**

If the fire is too big to be extinguished with the fire extinguisher, evacuate from the vehicle, call the fire department, and let them know the vehicle is a Fuel Cell Electric Vehicle. Do not come close to the vehicle until the fire is totally extinguished.

### *Emergency venting of hydrogen gas*

If the temperature near the safety valve located at the rear under vehicle is over 110°C caused by a fire or other reasons, the safety valve will open to vent hydrogen gas. Venting the hydrogen gas makes a loud noise because the venting speed is very fast. Stay well away from the vehicle. This jet stream of hydrogen gas could ignite.

### *If a submersion in water occurs*

If your vehicle was flooded and has soaked carpeting or water on the flooring, you should not try to start the vehicle by pressing the POWER button.

Call an authorized HYUNDAI dealer.

### *If you have a flat tire while driving*

If a tire goes flat while you are driving:

1. Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause a loss of control. 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 firm, level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
2. When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake and put the gear into the P (Park) position.
3. Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.

### *If the vehicle stalls while driving*

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Try to start the vehicle again. If your vehicle will not start, contact an authorized HYUNDAI dealer.

### *If the vehicle stalls at a crossroad or crossing*

If the vehicle stalls at a crossroad or crossing, set the gear in the N (Neutral) position and then push the vehicle to a safe place.

### *Exhaust pipe*

The FCEV is driven by electricity which is generated when the oxygen in the air and the hydrogen in the vehicle is combined. The principle is the opposite of the electrolysis of water; the decomposition of water making hydrogen and oxygen.

The FCEV is emission-free and water is created when the hydrogen and oxygen reacts in the process of making the electricity. Some water may be discharged through the exhaust pipe when the vehicle is turned off after driving. This is normal but be careful in winter as the puddle made by the exhausted water may freeze resulting in accident.

Also, take cautious as the exhausted steam may reach the vehicle parked in the back when you turn off the vehicle in winter.

### *Hydrogen station*

You can search the hydrogen fueling station and set the station as the destination in the Infotainment system screen. Select 'Menu-Nearby POI' in the map screen and select 'Fuel stations' to see the list of stations. Set the nearest station as the destination. Check the station operation status and opening hours before visiting the station.

Fully refueling the vehicle may be impossible depending on the station condition and the reachable range may change accordingly.

Also, the refueling time may vary depending on the hydrogen fueling pressure and ambient temperature. The reachable range may change according to the driving environment (weather, traffic, etc.) and driving method (sudden acceleration, heating and air conditioning, etc.).

* Refueling the hydrogen gas must be done by the person who has completed the certification course and training related to the high-pressure gas. Self-refueling is prohibited.

| Category | Questions | Answers |
|---|---|---|
| Vehicle overview (10 items) | 1. Does a Hydrogen Fuel Cell Electric Vehicle (FCEV) have similar performance to standard, non-electric vehicles? | FCEV performance characteristics are generally equivalent to standard vehicles, but with better noise control. |
| | 2. If water floods the fuel cell power module compartment, due to heavy rain or flooding for example, will it have any effect on the vehicle? | Every component housed in the fuel cell power module compartment is designed to be waterproof through evaluation which meets the IP69K standard, so you don't have to worry about any potential faults or safety problems if water contacts the fuel cell. However, if the vehicle is fully flooded, have the vehicle checked by an authorized HYUNDAI dealer. |
| | 3. When starting or stopping the vehicle, there's a noise. Is this noise cause for concern? | The sound you hear is normal. The noise emanates from the blower motor starting up to remove any residual water vapor in the fuel cell system. Also, when you turn on the vehicle you may hear a brief operation sound from the hydrogen storage system which is located on the back of the vehicle. This is a normal sound which is occurred when the system tries to balance the pressure between the hydrogen tanks. |
| | 4. Is there a possibility that extremely cold weather can prevent vehicle startup? | In most instances, the vehicle can get startup in cold weather without any problems. However, the vehicle may not start if the vehicle is parked with the ignition off for over a week in cold temperatures. In this case, turn on the vehicle 2-3 times repeatedly. If you will not be turning on the ignition for more than a week in cold weather, it is recommended that you park the vehicle inside a building, if possible.<br><br>Notice)<br>In particular, make sure to park the vehicle indoor when the temperature is below -30°C. If the vehicle is parked outside for over 12 hours under such weather fuel cell components may be damaged. Also, avoid driving under such weather to prevent damaging the fuel cell components. |

| Category | Questions | Answers |
|---|---|---|
| Vehicle overview (10 items) | 5. Why is there an engine noise at low speeds, even though there is no engine? | The noise is generated from the air compressor and cooling pump working to supply air to the fuel cell or it's from Virtual Engine Sound System (VESS). |
| | 6. When turning on and off the vehicle in cold weather, there's a loud noise. Is this noise cause for concern? | When you turn on the vehicle or turn off the vehicle in cold weather, the air compressor removes the generated water inside the fuel cell system and the noise is generated during this process, which is normal. In this case, certain amount of water may drain through the vehicle bottom and exhaust pipe. |
| | 7. Why does a noise emanate when the vehicle moves in reverse? | Normally, the noise is a result of the Virtual Engine Sound System (VESS) working when the FCEV runs at low velocity (1~12 mph (1~20 km/h)) after shifting to D or N. However, when shifting to R, the VESS operates immediately, regardless of vehicle speed. In addition, a separate warning chime will sound to have the pedestrian aware of the approaching vehicle. |
| | 8. The FCEV is equipped with a reduction gear but no transmission. What makes it different from standard vehicles? | The transmission of standard vehicles delivers power as conditions require via multiple transmission gears. However, the reduction gear of the FCEV is designed to deliver power by reducing the motor's RPM as operating conditions dictate, or to move backwards by reversing the rotational direction of the shaft. |

| Category | Questions | Answers |
|---|---|---|
| Vehicle overview (10 items) | 9. Can driving on test roads or over speed bumps damage the high voltage battery and hydrogen tank? | The high voltage battery and hydrogen tank are unlikely to be damaged under normal driving conditions. However, if the system begins to malfunction due to a direct and serious vehicular impact, you are informed of those system errors via warning lights on and the cluster display.<br>• Service warning light : |
| | 10. A water-like liquid is being discharged from the muffler and bottom of the vehicle. Is it harmful to humans? | Water or vapor discharged is generated from electrochemical reactions in the fuel cell stack, and is not harmful to humans. However, liquids generated from the reactions can be somewhat acidic, so DO NOT touch or ingest the liquid!<br>Also, the water discharged when parking the vehicle indoors may make a puddle on the ground. Be careful as such puddle can freeze and result in accident during winter. |

| Category | Questions | Answers |
|---|---|---|
| Vehicle Management (12 items) | 11. Can I wash my FCEV with pressurized water? What if water flows into the fuel cell power module compartment? | Every component housed in the fuel cell power module compartment is designed to be waterproof like those found in standard vehicles. Therefore, a short circuit of the FCEV cannot happen while washing the car. However, your FCEV works by utilizing high-voltage electric power, so it is recommended that you avoid high-pressure car washes. If the insulation resistance of the FCEV deteriorates due to car wash, a High voltage warning light may turn on the cluster.<br>• Service warning light : |
| | 12. When washing the fuel cell power module compartment, is there any potential risk of electric shock resulting from a high-voltage short circuit? | The FCEV is designed to be a waterproof structure, but please avoid washing the inside of the compartment if possible. Because there are many high voltage parts in the power module compartment. |
| | 13. Can I wash the bottom of the vehicle? If yes, what should I be aware of? | The FCEV is designed to be a waterproof structure, but please avoid washing the botttom of the vehicle if possible. Because there are high voltage cables in the under cover. |
| | 14. Can driving with a tire chain affect the drive motor? | Driving with a tire chain causes no direct damage to the drive motor. |
| | 15. How should I jump start the vehicle? | Try charging it by pressing the "12V BATT RESET" button first. Refer to the "If the 12 volt battery is discharged" in this guide book. It it doesn't work, refer to the "Jump starting" in the Owner's manual chapter 6. |

| Category | Questions | Answers |
|---|---|---|
| Vehicle Management (12 items) | 16. Does the FCEV use a different coolant type from that of standard vehicles? (Difference between Stack cooling coolant and Device cooling coolant.) | Stack cooling coolant is an exclusive coolant for the fuel cell, which is characterized by its use of a non-ionic anti-corrosion agent (an additive) and very low electric conductivity. In comparison, the device cooling coolant is a coolant similar to that used in standard vehicles and has a very high electric conductivity.<br>If the stack cooling coolant is used with the electrical cooling system, it will corrode the electrical system parts. If the device cooling coolant is used with the fuel cell cooling system, it will damage the system insulation resistor due to high electric conductivity. This carries the additional risk of shocking the driver (electric shock). |
| | 17. What should I be aware of when parking the vehicle? Can I park the FCEV in an enclosed underground parking lot? (Risk of hydrogen gas leak.) | Hydrogen gas supply is cutoff after Power-OFF to prevent the hydrogen gas from leaking. |
| | 18. If the FCEV will be parked for a long period, what should I do? | For long-term parking situations, a high-voltage battery will gradually lose its charge [low SOC(State Of Charge)], potentially causing ignition failure.<br>1. In order to minimize the discharge of the high-voltage battery, turn off the power using the POWER button and disconnect the (-) terminal of the auxiliary battery (12 V) from the vehicle.<br>2. To recharge the high-voltage battery, it is recommended that you drive your FCEV two or three times a month, for no less than 10 minutes or 2 miles (3 km) during each session.<br>3. If the vehicle does not startup, press the "12V BATT RESET" button or jump start the vehicle. Otherwise contact an authorized HYUNDAI dealer. |

| Category | Questions | Answers |
|---|---|---|
| Vehicle Management (12 items) | 19. What are the do-it-yourself (DIY) maintenance items for the FCEV? | DIY Check: Device cooling coolant, Stack cooling coolant, Brake Fluid, Tire and Wheels<br>DIY Maintenance: Washer fluid, Air cleaner, Climate control air filter, Wiper blades, Fuse, Light bulb |
| | 20. What should I be aware of when doing DIY maintenance work? | Be careful not to touch the high-voltage cable (orange color), coolant, and ion filter. |
| | 21. Tell me what the potential effects are of parking long-term in a cold area (-4 °F (-20 °C)) for the FCEV, and whether or not the vehicle can startup under such conditions. | In most instances, the vehicle can be started in cold weather without any problems. However, the vehicle may not start if it is parked with the power off for over a week in cold temperatures. In this case, If you will not be turning on the vehicle for more than a week in cold weather, it is recommended that you park the vehicle inside a building, if possible. |
| | 22. What parts must I not touch with hands? For example, high-voltage cable, ion filter, etc.? | High-voltage cable (orange color), ion filter, parts with a high voltage warning sticker.<br>Also, never touch the hydrogen storage system under the liftgate, the hydrogen supply pipe under the vehicle and the hydrogen supply system components on the right side (based on the driver's position) of the hood. |

| Category | Questions | Answers |
|---|---|---|
| Cluster/ Warning Lamp (9 items) | 23. What shall I do if the hydrogen gas leak warning light turns on on the cluster? H2 (Red) | If the hydrogen gas leak warning light turns on during "READY" status or in driving mode, this indicates a hydrogen gas leak inside the vehicle. DO NOT lose your composure. Park your vehicle and turn OFF the vehicle. Then, we recommend that you contact an authorized HYUNDAI dealer for service. |
| | 24. Can I keep driving the vehicle even if the hydrogen gas leak warning light turns on on the cluster? H2 (Red) | The fuel cell stops working if hydrogen is no longer available. However, the FCEV can run for an additional distance (About 2 miles (3 km)) in EV mode where the vehicle runs only on battery power. Mileage in EV mode can vary depending on the "state of charge" (SOC) of the high voltage battery, so move your vehicle to the nearest shoulder on the road. Then, we recommend that you contact an authorized HYUNDAI dealer for service. |
| | 25. While driving to a service center after the hydrogen gas leak warning light turns on on the cluster, is it possible that the vehicle catch fire if there is something nearby to ignite the leaking gas (cigarette butt, etc.)? H2 (Red) | As soon as the hydrogen gas leak warning light appears, the fuel cell operation is disabled immediately to cut the supply of hydrogen. This prevents the possibility of a fire occurring. |
| | 26. What should I do if a power down warning light turns on? | If the power down warning light turns on during "READY" status or in driving mode, power supply to the fuel cell system is cut off. If the warning light turns on repeatedly when restarting the vehicle after parking your car on the safe place, we recommend that you contact an authorized HYUNDAI dealer for service. |

| Category | Questions | Answers |
|---|---|---|
| Cluster/ Warning Lamp (9 items) | 27. What should I do if the service warning light turns on? | If the service warning light turns on during "READY" status or in driving mode, it may indicate a malfunction in operation with any fuel cell system. We recommend that you contact an authorized HYUNDAI dealer for service. |
| | 28. What should I do if the master warning light turns on? | If the service warning light turns on when there is a malfuction in operation in any of the vehicle systems. Please look at the cluster display for details and we recommend that you contact an authorized HYUNDAI dealer for service if needed. |
| | 29. How much farther (roughly) can I drive my FCEV when the fuel warning light turns on? (Remaining mileage) | You can continue driving for an additional 40~55 miles (70~90 km). It may depend on driving mode. |
| | 30. When restarting the vehicle, the " " indicator turns on on the cluster. What does this mean? | It means that the fuel cell system is working in good order and your car is ready to drive. |
| | 31. Why does the vehicle's hydrogen tank have a life expectancy? | The hydrogen tank is frequently refueled with the high pressure hydrogen gas and the number of times refueling the vehicle is limited to 5,000 times (or 15 years). The hydrogen storage system counts the number of times the vehicle is refueled and turns on the warning light when the vehicle is refueled for over 4,995 times. Every time the vehicle is turned on the warning message "Replace hydrogen tank. Maximum number of refill cycles exceeded" is displayed on the cluster. The vehicle can be driven about 1-3 million kilometers until the vehicle is refueled 5,000 times, meaning that the hydrogen tank is used semi-permanently under common driving condition. |

| Category | Questions | Answers |
|---|---|---|
| Hydrogen System (7 items) | 32. What happens if hydrogen in the hydrogen tank is completely consumed? | The fuel cell stops working if hydrogen is no longer available. However, the FCEV can run for an additional distance (About 2 miles (3 km)) in EV mode where the vehicle runs only on battery power. Mileage in EV mode can vary depending on the "status of charge" (SOC) of the high voltage battery, so move your vehicle to the nearest shoulder on the road. Then, we recommend that you contact an authorized HYUNDAI dealer for service. |
| | 33. If the hydrogen gas tank is fully refueled, how much farther can the FCEV run? | It can travel as far as 300~370 miles (500~600 km) at a constant vehicle speed of 50 mph (80 km/h). Realistically though, this travel distance is shorter due to normal acceleration and deceleration when driving. |
| | 34. Which mechanism allows for the hydrogen gas tank to be refueled, and is it possible to refuel the tank as much as you need? Is it possible that the tank may not be fully refueled? | The tank is refueled by utilizing the difference in hydrogen pressure between the refueling station and the vehicle. When refueling, the hydrogen gas pressure of the refueling station is higher than that of the vehicle. The act of refueling can be stopped as desired. Normally, the gas tank is not fully refueled with hydrogen if the station's hydrogen pressure is not sufficiently high, or if the station system cannot communicate with the vehicle.<br><br>※ System and the vehicle communicates the temperature and pressure of hydrogen gas via wireless network. |

| Category | Questions | Answers |
|---|---|---|
| Hydrogen System (7 items) | 35. In the beginning, when driving the new vehicle, I hear hissing sounds regularly from the hood while the vehicle is stopped. Is this noise cause for concern? | In the beginning, the purity of hydrogen in the hydrogen tank of the new vehicle may be somewhat low. It is a normal noise which occurs when the system discharges the hydrogen more frequently compensating the low hydrogen purity. The fuel efficiency of the new vehicle may be low in the beginning due to the frequent hydrogen discharge. However, this is a normal condition. In general, the hydrogen purity returns to normal range after refueling 3-4 times. |

| Category | Questions | Answers |
|---|---|---|
| Hydrogen System (7 items) | 36. How should I refuel the tank with hydrogen gas? And what should I take care of? | * Close the fuel cap and fuel filler door firmly.<br>* The gas tank may not be fully filled depending on the conditions of the hydrogen station.<br>* Carefully read any precautions about refueling at hydrogen gas stations.<br>* Be careful not to cause static electricity when touching the fuel filler with your hand. (To avoid static electricity, be sure to touch your bare hand on something metallic as far from the fuel filler as possible.)<br>* DO NOT get out of, or go into, your car while the gas tank is being refueled.<br>* DO NOT use any mobile device. Fire may occur due to electric current / radio wave from the mobile device.<br>* Make sure that the fuel cell system stops working before refueling the gas tank.<br>* DO NOT smoke a cigarette or strike a lighter while refueling the gas tank.<br>* If you need assistance with refueling the gas tank after completely consuming all the available fuel in the vehicle, we recommend that you contact an authorized HYUNDAI dealer. |

| Category | Questions | Answers |
|---|---|---|
| Hydrogen System (7 items) | 37. Is it possible that water, oil, etc. may be introduced to the hydrogen gas tank via the fuel filler? If yes, what do I need to do to prevent this? | Normally, water and oil cannot flow into the hydrogen tank via the fuel filler, but it can flow in while refueling. Be careful not to introduce any contaminants via the fuel filler. |
| | 38. While refueling the hydrogen, I hear irregular abnormal noises. Is this noise cause for concern? | The hydrogen gas is in high pressure (70 MPa) condition when refueled to the vehicle's storage tank. Therefore, you will hear the sound of the gas flowing in the beginning. Abnormal noise is occurred due to the gas flow because of the difference in refueling pressure, etc. depending on the gas pressure condition at the refueling station and this is very normal. |

| Category | Questions | Answers |
|---|---|---|
| Fuel Cell Stack/High Voltage Battery (4 items) | 39. What happens if hydrogen gas leaks from the fuel cell stack? $H_2$ (Red) | If hydrogen gas leaks beyond what's tolerable from the fuel cell stack, a hydrogen sensor installed in the system detects the leak and in response, turns ON the hydrogen gas leak warning light in the cluster. |
| | 40. Can the fuel cell stack explode or burn out due to overheating? | The fuel cell stack passed a high temperature test and is deemed safe, so it is unlikely to explode. |
| | 41. Which symptoms occur if the fuel cell system malfunctions? | If the fuel cell system malfunctions, warning lights specific to the actual problem appear on the cluster display. When this happens, the vehicle speed may be limited, or the fuel cell system may shut down. DO NOT lose your composure if this happens. Park your vehicle and turn OFF the vehicle. Then, we recommend that you contact an authorized HYUNDAI dealer for service. |
| | 42. Is the recharge performance of the high voltage battery reduced depending on its length of use? | Like any vehicle component, the high voltage battery will decrease in performance as it ages over time. However, the high voltage battery of the FCEV is durable enough to work at peak performance beyond the warranty period. |

| Category | Questions | Answers |
|---|---|---|
| Vehicle Accidents/ Towing (5 items) | 43. Is there a risk of electric shock from the high-voltage parts in the event of a collision or accident? | The FCEV is designed to detect impact events during a collision or accident so that the hydrogen gas supply is immediately cutoff. Also, the high-voltage relay is activated to cutoff the supply of electric power to the fuel cell stack and high-voltage battery. Moreover, the FCEV satisfies international electrical safety standards for collisions and accidents. |
| | 44. Should I take any special safety precautions in the event of a collision or accident? | Despite the uniqueness of the hydrogen FCEV, you do not have to take any special safety precautions in the event of a minor collision or accident. In the event of a minor accident, turn off the vehicle to cutoff the supply of electric power and hydrogen gas. Also, the FCEV is equipped with collision sensors at the front and rear of the vehicle so those sensors are activated during an actual collision to automatically cutoff the supply of power and hydrogen to ensure driver and passenger safety. For other situations, follow the same procedures as you would with a standard vehicle. Depending on the severity of the collision or accident, take appropriate measures. |
| | 45. Is a high-voltage battery designed to ensure occupant safety? Can it explode from a collision? | Our battery packs are designed to prevent any explosion due to physical impact or damage, and they fully satisfy international safety standards. |

| Category | Questions | Answers |
|---|---|---|
| Vehicle Accidents/ Towing (5 items) | 46. Is a hydrogen tank designed to ensure occupant safety? Can it explode from a collision? | The hydrogen tank is designed to prevent any risk of explosion. It is completely safe. |
| | 47. How should the FCEV be towed, and what precautions should be taken? | The FCEV can be towed in the same manner as standard vehicles. If you need emergency towing, it is recommended that you contact an authorized HYUNDAI dealer. To avoid damage to the vehicle, you need to follow proper pulling and towing procedures. The FCEV is equipped with a front wheel drive (FWD) motor, so use a flatbed or wheel dolly to tow the vehicle. If the front wheels touch the road surface while being towed, they will rotate and this can cause the FWD motor to generate electricity. This can cause unwanted failure of the FCEV. |

| Category | Questions | Answers |
|---|---|---|
| Explosion or Fire (5 items) | 48. What should I do if the FCEV catches fire? | 1. Stop driving the car. Move the shift to P (Park), then step on the brake to turn OFF the vehicle. The fuel cell stack is shut down, which cuts off the supply of hydrogen fuel.<br>2. If possible, open the windows to ventilate the air.<br>3. If the fire is small enough to get under your own control, use the fire extinguisher to put it out.<br>If the fire is much larger, get out of your car and contact the local fire station to report your FECV is on fire. DO NOT get close to your car before the fire is completely extinguished. |
| | 49. In case of vehicle fire, should I use the fire extinguisher? Can I use water to extinguish the fire? | In the event your FCEV catches fire with the power system OFF, the power source of the high-voltage system is cut off, so you are unlikely to get shocked while you put out the fire using water. (Even when the vehicle is submerged in water, there is no risk of getting shocked.)<br>However, if your car catches fire with the ignition ON, you MUST use the fire extinguisher. Any attempt to extinguish the fire with water may cause electric shock. |
| | 50. What kind of fire extinguisher should I use? | It is recommended that you use a dedicated fire extinguisher (CO2) for an electrical fire of the high-voltage system. |
| | 51. Can the hydrogen tank explode if it overheats in very hot weather? | The hydrogen tank passed a high temperature test and is deemed safe, so it is unlikely to explode. |
| | 52. In case of vehicle fire, is it possible that the hydrogen tank will explode? | In case of vehicle fire, a heat-sensitive safety valve is activated to exhaust the hydrogen gas downward from the tank by force. Therefore, the hydrogen tank is unlikely to explode. However, additional flames can flare up from the forced exhaustion of the gas, so please evacuate to a safe place far away from the vehicle. |

# Your vehicle at a glance



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**The actual shape may differ from the illustration.**

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5. Side view mirror .....3-32
6. Wide sunroof .....3-39
7. Front windshield wiper .....3-107, 7-24
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# EXTERIOR OVERVIEW (REAR VIEW)

**The actual shape may differ from the illustration.**

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10. Rear window wiper .....3-107, 7-26

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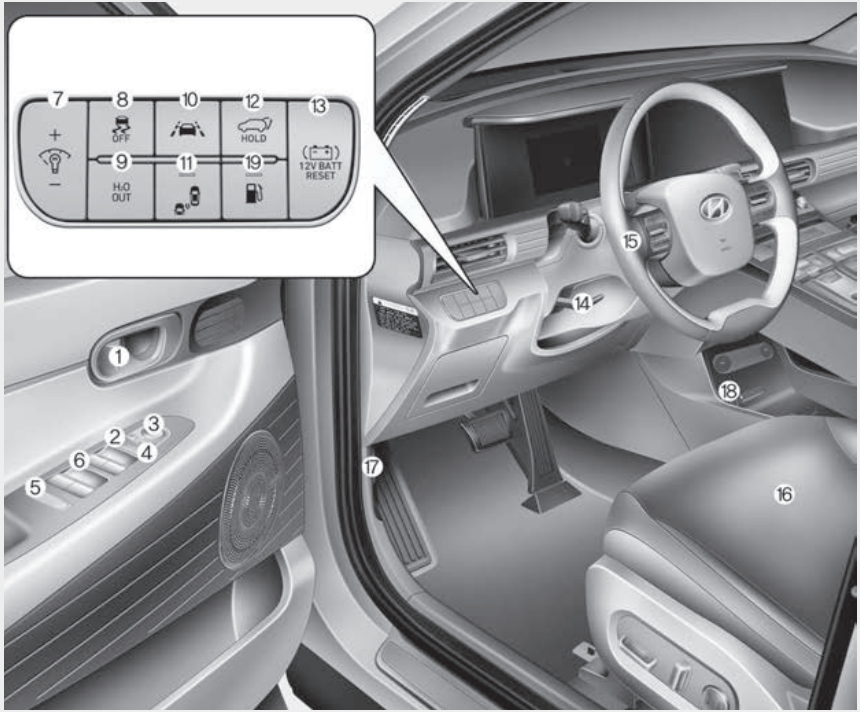
# INTERIOR OVERVIEW

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**The actual shape may differ from the illustration.**

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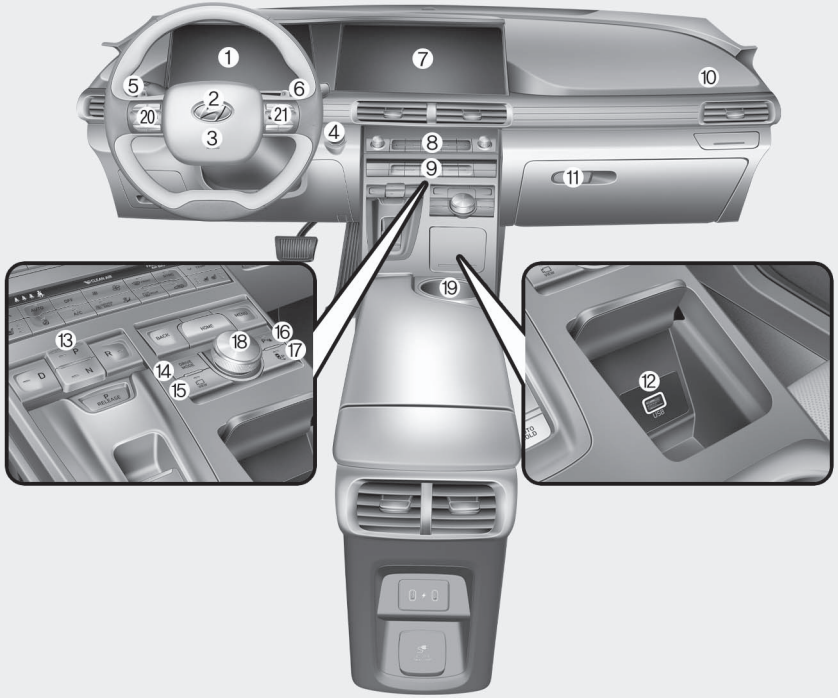

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**The actual shape may differ from the illustration.**

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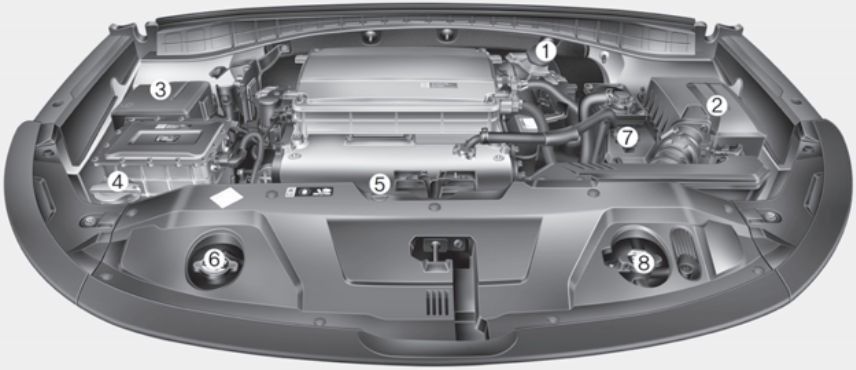
# FUEL CELL POWER MODULE COMPARTMENT OVERVIEW

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6. Device cooling radiator cap .....7-14
7. Stack cooling coolant reservoir.....7-17
8. Stack cooling radiator cap .....7-17

**The actual Fuel cell power module compartment in the vehicle may differ from the illustration.**

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# Safety system of your vehicle

This chapter provides you with important information about how to protect yourself and your passengers. It explains how to properly use your seats and seat belts, and how your air bags work. Additionally, this chapter explains how to properly restrain infants and children in your vehicle.




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# 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 accidents. Air bags are designed to supplement seat belts, not replace them. So even though your vehicle is equipped with air bags, 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. Larger children should use a booster seat with the lap/shoulder belt until they can use the seat belt properly without a booster seat.

## Air Bag Hazards

While air bags 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 shorter adults are at the greatest risk of being injured by an inflating air bag. 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, other passengers, and using cellular 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 or getting into an accident:

- ALWAYS set up your mobile devices (for example, MP3 players, phones, navigation units, etc.) when your vehicle is parked or safely stopped.

- ONLY use your mobile device when allowed by laws and when conditions permit safe use. NEVER text or email while driving. Most states have laws prohibiting drivers from texting. Some states and cities also prohibit drivers from using handheld phones.
- 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.

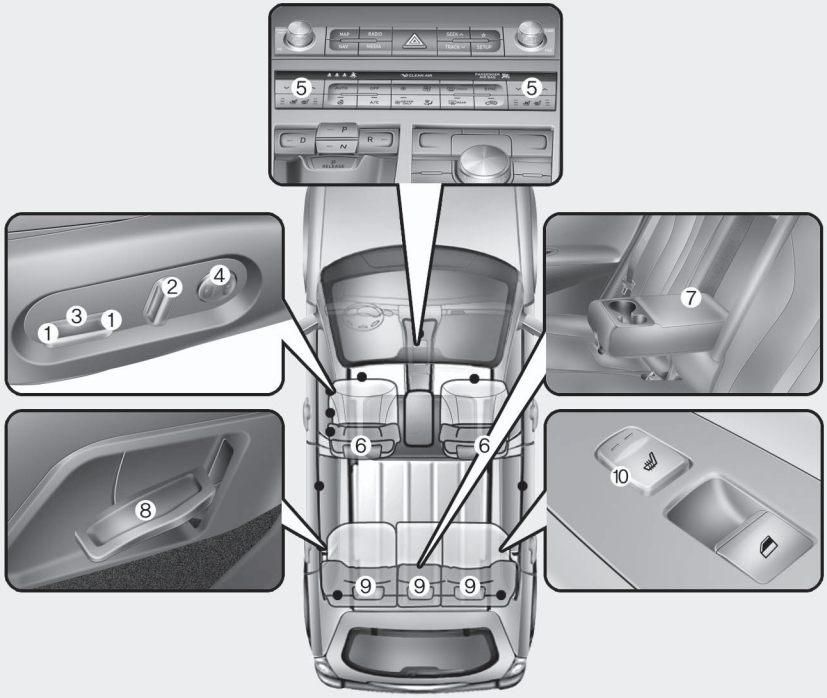
## Control Your Speed

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 Safe Condition

Having a tire blowout or a mechanical failure can be extremely hazardous. To reduce the possibility of such problems, check your tire pressures and condition frequently, and perform all regularly scheduled maintenance.

# SEATS




**Front seats**

(1) Seat sliding forward or rearward
(2) Seatback angle adjustment
(3) Seat cushion angle adjustment
(4) Lumbar support adjustment (Driver's seat)*
(5) Seat warmer / Air ventilation seat*
(6) Head restraint

**Rear seats**

(7) Armrest
(8) Seatback angle and folding adjustment
(9) Head restraint
(10) Seat warmer*

* : If equipped

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## Safety Precautions

Adjusting the seats so that you are sitting in a safe, comfortable position plays an important role in driver and passenger safety together with the seat belts and air bags in an accident.

**⚠ 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 an accident or a sudden stop. Serious or fatal internal injuries could result because the seat belt cannot operate properly.**

### *Air bags*

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

The National Highway Traffic Safety Administration (NHTSA) recommends that drivers allow at least 10 inches (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 air bag, take the following precautions:**

- **Adjust the driver's seat as far to the rear as possible while maintaining the ability to maintain full control of 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 the steering wheel and the air bag.**
- **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. Infants and small children must be restrained in appropriate child restraint systems. Adults and children who have outgrown a booster seat must be restrained using the seat belts.

**⚠ WARNING**

Take the following precautions when adjusting your seat belt:

- 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.

## Front Seats

**⚠ WARNING**

Take the following precautions when adjusting your seat:

- 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 an accident.
- Do not place anything under the front seats. Loose objects in the driver's foot area could interfere with the operation of the foot pedals, causing an accident.
- 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. When you operate the seat, gas may exit out of the lighter causing a fire.
- 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.

**⚠ 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.

### *Power adjustment*

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

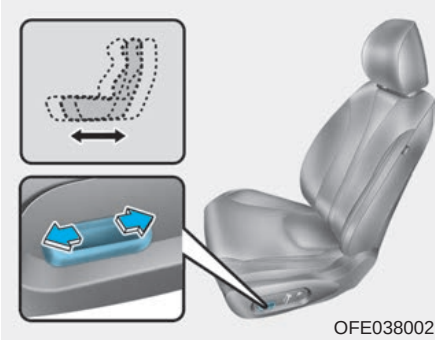
**⚠ WARNING**

**NEVER allow children in the vehicle unattended. The power seats are operable when the vehicle is turned off.**

**NOTICE**

**To prevent damage to the seats:**

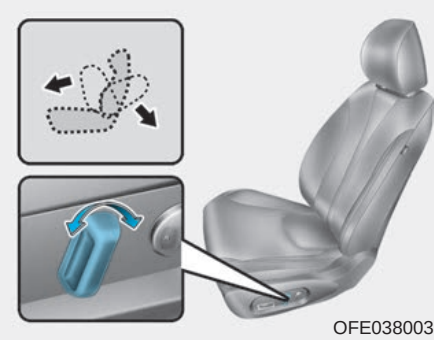
- **Always stop adjusting the seats when the seat has moved as far forward or rearward as possible.**
- **Do not adjust the seats for longer than necessary when the vehicle is turned off. This may result in unnecessary battery drain.**
- **Do not operate two or more seats at the same time. This may result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




**Forward and rearward adjustment**

To move the seat forward or rearward:

1. Push the control switch forward or rearward.
2. Release the switch once the seat reaches the desired position.




**Seatback angle**

To adjust the seatback:

1. Rotate the top of control switch forward or rearward.
2. Release the switch once the seatback reaches the desired position.

**Reclining seatback**

Sitting in a reclined position when the vehicle is in motion can be dangerous. Even when buckled up, the protection of your restraint system (seat belts and air bags) is greatly reduced by reclining your seatback.

**⚠ WARNING**

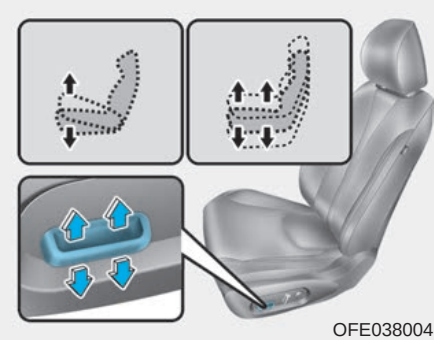
**NEVER ride with a reclined seatback when the vehicle is moving.**

**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, seats with the seatbacks upright and should be belted properly.**

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 an accident, 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.




### Seat cushion tilt

To change the angle of the front part of the seat cushion:

Push the front portion of the control switch up to raise or down to lower the front part of the seat cushion.

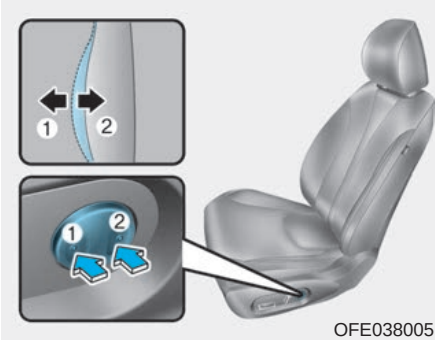
Release the switch once the seat reaches the desired position.

### Seat height

To change the height of the seat :

Push the rear portion of the control switch up to raise or down to lower the height of the seat.

Release the switch once the seat reaches the desired position.

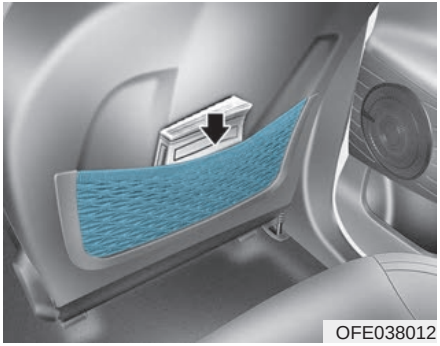



### Lumbar support (for driver's seat)

The lumbar support can be adjusted by pressing the lumbar support switch.

- Press the front portion of the switch (1) to increase support or the rear portion of the switch (2) to decrease support.

### *Seatback pocket*


OFE038012

The seatback pocket is provided on the back of the front passenger's seatback.

**⚠ WARNING**

**To prevent the Occupant Classification System from malfunctioning:**

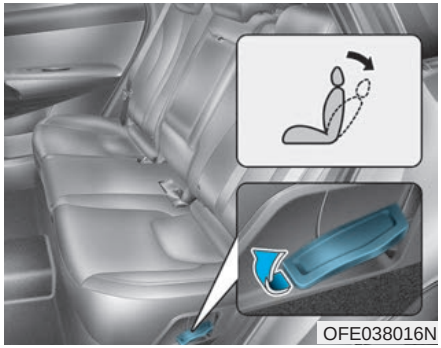
**Do not hang onto the front passenger's seatback.**

**⚠ CAUTION**

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

## Rear Seats

### *Rear seat adjustment*


OFE038016N

#### Seatback angle

To recline the seatback:

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.)

### *Folding the rear seat*

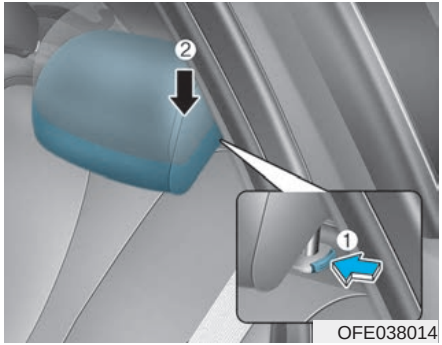
The rear seatbacks can be folded to facilitate carrying long items or to increase the luggage capacity of the vehicle.

**⚠ WARNING**

- **Never allow passengers to sit on top of the folded down seatback while the vehicle is moving. This is not a proper seating position and no seat belts are available for use. This could result in serious injury or death in case of an accident or sudden stop.**
- **Objects carried on the folded down seatback should not extend higher than the top of the front seatbacks. This could allow cargo to slide forward and cause injury or damage during sudden stops.**

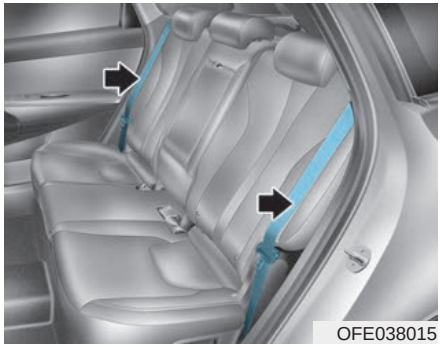
To fold down the rear seatback:

1. Set the front seatback to the upright position and if necessary, slide the front seat forward.

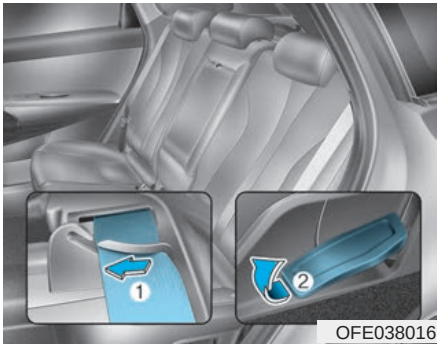


OFE038014

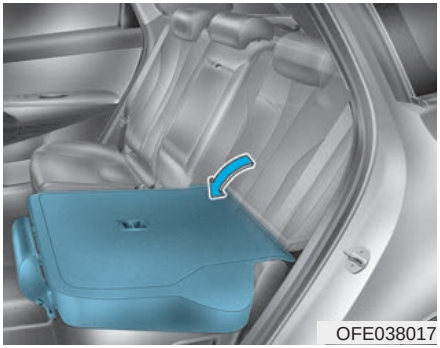
2. Lower the rear head restraints to the lowest position by pushing and holding the release button (1) and pushing down on the head restraint (2).


OFE038015

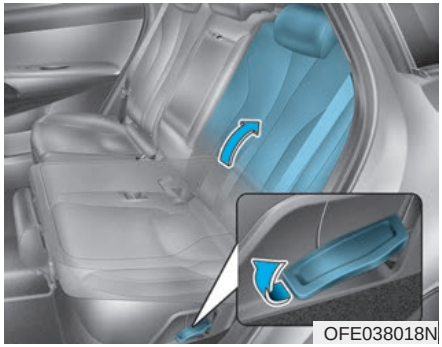
3. Locate the seatbelt toward the outboard position before folding down the seatback. If not, the seatbelt system may be interfered by the seatback.



OFE038016


OFE038017

4. Put out the belt from guide (1) and pull up the seatback folding lever (2), then fold the seat toward the front of the vehicle.


OFE038018N

5. To use the rear seat, lift and unfold the seatback to the upright position by pulling up the recline lever.

   Push the seatback firmly until it clicks into place. Make sure the seatback is locked in place.

6. Return the rear seat belt to the proper position. Insert the belt in the guide located on the side of the rear head restraints.

**⚠ WARNING**

**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 an accident 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.**

**⚠ WARNING**

**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.**

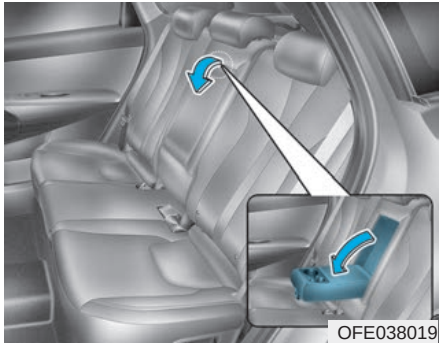
**⚠ WARNING**

**Make sure the vehicle is off, shifted to 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 moved to another position.**

**⚠ CAUTION**

- **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.**

### *Armrest*




The armrest is located in the center of the rear seat. Use the strap in the center of the armrest to pull it down.

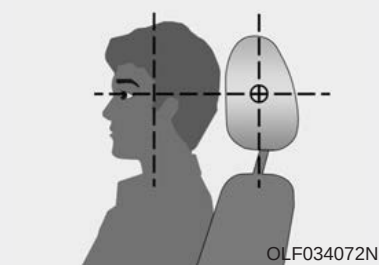
## Head Restraints

The vehicle's front and rear seats have adjustable head restraints. The head restraints provide comfort for passengers, but more importantly they are designed to help protect passengers from whiplash and other neck and spinal injuries during an accident, especially in a rear impact collision.

**⚠ WARNING**

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

- **Always properly adjust the head restraints 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 the middle of the head restraint is at the same height as the height of the top of the eyes.**
- **NEVER adjust the head restraint position of the driver's seat when the vehicle is in motion.**
- **Adjust the head restraint as close to the passenger's head as possible. Do not use a seat cushion that holds the body away from the seatback.**
- **Make sure the head restraint locks into position after adjusting it.**

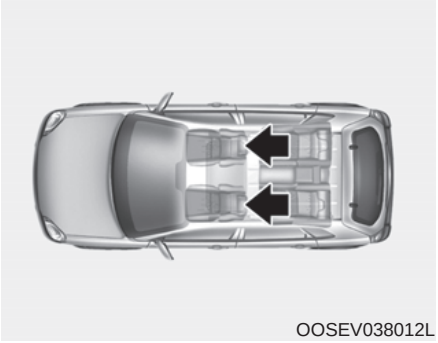
***NOTICE***

**To prevent damage, NEVER hit or pull on the head restraints.**

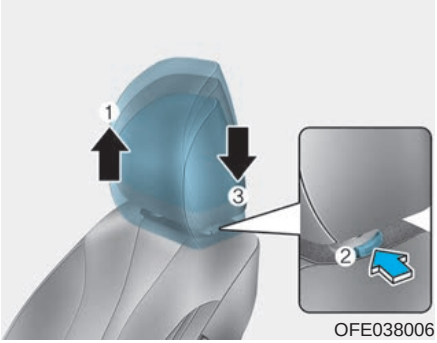
**⚠ CAUTION**

**When there is no occupant in the rear seats, adjust the height of the head restraint to the lowest position. The rear seat head restraint can reduce the visibility of the rear area.**

### *Front seat head restraints*




The vehicle's front and passenger's seats are equipped with adjustable head restraints for the passengers safety and comfort.



OFE038006

### Adjusting the height up and down

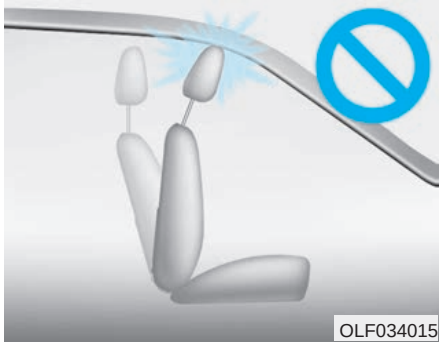
To raise the head restraint:

1. Pull it up to the desired position (1).

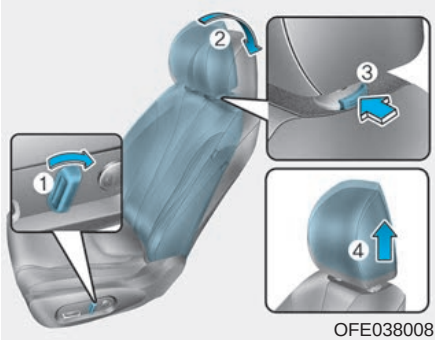
To lower the head restraint:

1. Push and hold the release button (2) on the head restraint support.
2. Lower the head restraint to the desired position (3).

**NOTICE**


OLF034015

**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.**

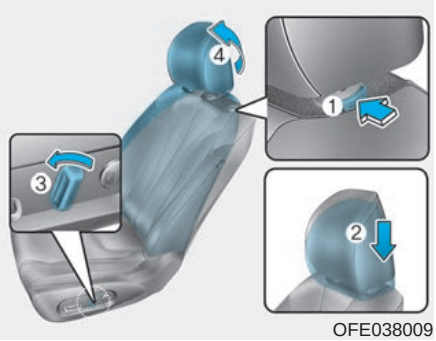


OFE038008

### Removal/Reinstallation

To remove the head restraint:

1. Recline the seatback (2) rearward using the seatback angle lever/ switch (1).
2. Raise the head restraint as far as it can go.
3. Press the head restraint release button (3) while pulling the head restraint up (4).

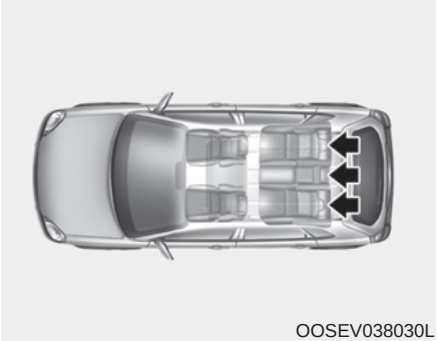


OFE038009

To reinstall the head restraint:

1. Put the head restraint poles (2) into the holes while pressing the release button (1).
2. Adjust the head restraint to the appropriate height.
3. Adjust the seatback (4) forward using the seatback angle lever/ switch (3).

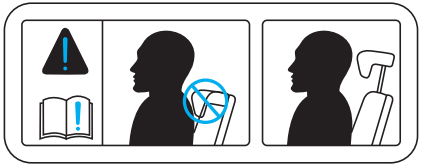
### *Rear seat head restraints*


OOSEV038030L

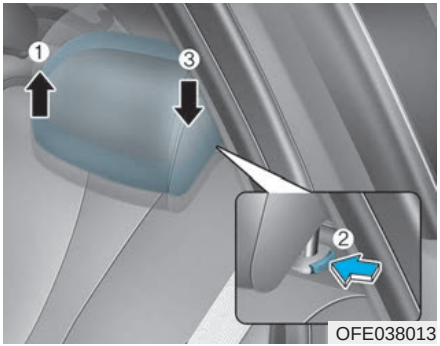
The rear seats are equipped with head restraints in all the seating positions for the passenger's safety and comfort.

**⚠ CAUTION**

- **Adjust the head restraints so the middle of the head restraints is at the same height as the height of the top of the eyes.**



- **When seated in the rear seat, do not adjust the height of the head restraint to the lowest position.**



OFE038013

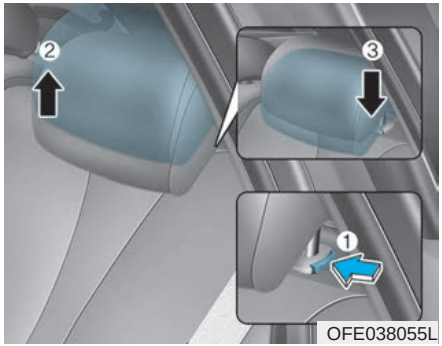
### Adjusting the height up and down

To raise the head restraint:

1. Pull it up to the desired position (1).

To lower the head restraint:

1. Push and hold the release button (2) on the head restraint support.
2. Lower the head restraint to the desired position (3).



OFE038055L

### Removal/Reinstallation

To remove the head restraint:

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

To reinstall the head restraint:

1. Put the head restraint poles into the holes (3) while pressing the release button (1).
2. Adjust the head restraint to the appropriate height.

## Seat Warmers and Air Ventilation Seats

### *Front seat warmers (if equipped)*

Seat warmers are provided to warm the seats during cold weather.

**⚠ WARNING**

**The seat warmers can cause a SERIOUS BURN, 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.**

**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 hospital outpatients.**
- **People with sensitive skin or who burn easily.**
- **Fatigued individuals.**
- **Intoxicated individuals.**

- **People taking medication that can cause drowsiness or sleepiness.**

**⚠ WARNING**

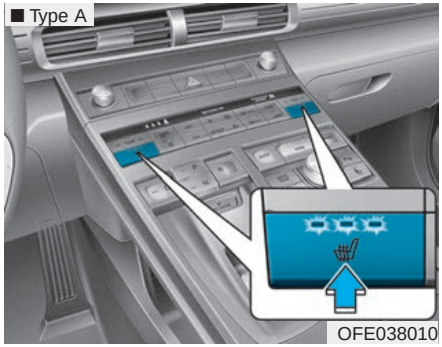
**NEVER place anything on the seat that insulates against heat when the seat warmer is in operation, such as a blanket or seat cushion. This may cause the seat warmer to overheat, causing a burn or damage to the seat.**

***NOTICE***

**To prevent damage to the seat warmers and seats:**

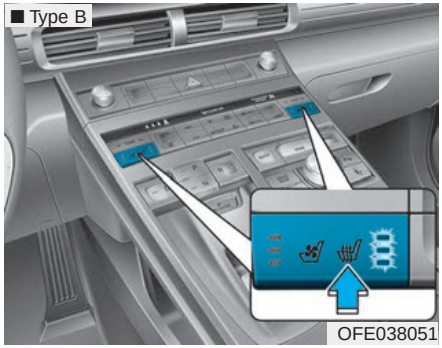
- **Never use a solvent such as paint thinner, benzene, alcohol or gasoline to clean the seats.**
- **Do not place heavy or sharp objects on seats equipped with seat warmers.**
- **Do not change the seat cover. It may damage the seat warmer.**

■ Type A



OFE038010

■ Type B



OFE038051

While the vehicle is ON, push either of the switches to warm the driver's seat or front passenger's seat.

During mild weather or under conditions where the operation of the seat warmer is not needed, keep the switches in the OFF position.

- Each time you push the switch, the temperature setting of the seat is changed as follows :

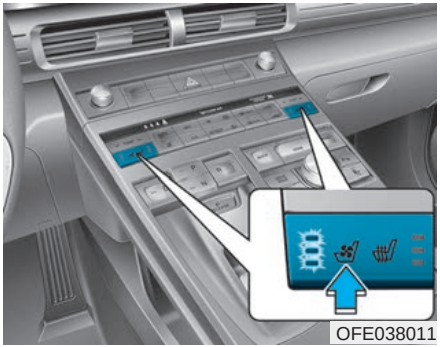
OFF → HIGH
↑ ↓
LOW ← MEDIUM

- When pressing the switch for more than 1.5 seconds with the seat warmer operating, the seat warmer will turn OFF.
- The seat warmer defaults to the OFF position each time the POWER button is turned to the ON position.

## Information

**With the seat warmer switch in the ON position, the heating system in the seat turns off or on automatically depending on the seat temperature.**

### *Front air ventilation seat (if equipped)*


OFE038011

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

When the operation of the air ventilation seat is not needed, keep the switches in the OFF position.

While the vehicle is ON, push the switch to cool the driver's seat or the front passenger's seat.

- Each time you push the switch, the airflow changes as follows:

  OFF → HIGH ( )
  ↑ ↓
  LOW ( ) ← MEDIUM ( )

- When pressing the switch for more than 1.5 seconds with the air ventilation seat operating, the operation will turn OFF.
- The air ventilation seats defaults to the OFF position each time the POWER button is placed to the ON position.

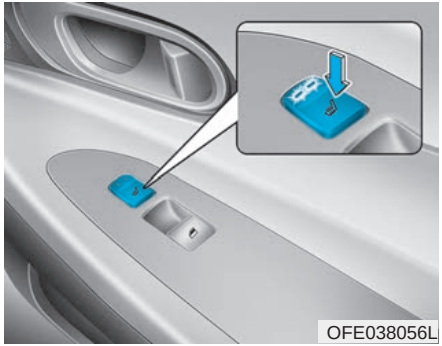
**NOTICE**

**To prevent damage to the air ventilation seat:**

- **Use the air ventilation seat ONLY when the climate control system is on. Using the air ventilation seat for prolonged periods of time with the climate control system off could cause the air ventilation seat to malfunction.**
- **Never use a solvent such as paint thinner, benzene, alcohol or gasoline to clean the seats.**
- **Avoid spilling liquids on the surface of the front seats and seatbacks; this may cause the air vent holes to become blocked and not work properly.**
- **Do not place materials such as plastic bags or newspapers under the seats. They may block the air intake causing the air vents to not work properly.**

- **Do not change the seat covers. It may damage the air ventilation seat.**
- **If the air vents do not operate, restart the vehicle. If there is no change, have the vehicle inspected by an authorized HYUNDAI dealer.**

### *Rear seat warmers (For CANADA)*




While the vehicle is ON, pusheither of the switches to warm the rearseat.

During mild weather or under conditions where the operation of the seatwarmer is not needed, keep the switches in the OFF position.

Each time you push the switch, thetemperature setting of the seat ischanged as follows :

OFF → HIGH ( ) → LOW ( )

The seat warmer defaults to the OFF position whenever the POWER button is placed to the ON position.

### Information

**With the seat warmer switch in the ON position, the heating system in theseat turns off oron automatically-depending on the seat temperature.**

# SEAT BELTS

This section describes how to use the seat belts properly. It also describes some of the things to avoid 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. Air bags are designed to supplement the seat belt as an additional safety device, but they are not a substitute. Most states require all occupants of a vehicle to wear seat belts.

**⚠ WARNING**

**Seat belts must be used by ALL passengers whenever the vehicle is moving. Take the following precautions when adjusting and wearing seat belts:**

- **ALWAYS properly restrain children under age 13 in the rear seats.**
- **NEVER allow children to ride in the front passenger seat. If a child age 13 or older must be seated in the front 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.**
- **Always wear both the shoulder portion and lap portion of the lap/shoulder belt.**
- **Do not use the seat belt if it is twisted. A twisted seat belt will not protect you properly in an accident.**
- **Do not use a seat belt if the webbing or hardware is damaged.**
- **Do not latch the seat belt into the buckles of other seats.**
- **NEVER unfasten the seat belt while driving. This may cause loss of vehicle control resulting in an accident.**
- **Make sure there is nothing in the buckle interfering with the seat belt latch mechanism. This may prevent the seat belt from fastening securely.**
- **No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.**

**⚠ WARNING**

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

- **Frayed, contaminated, or damaged webbing**
- **Damaged hardware**
- **The entire seat belt assembly after it has been worn in an accident, even if damage to webbing or assembly is not apparent**

## Seat Belt Warning Light

***Seat belt warning light***

### Driver's seat belt warning

As a reminder to the driver, the seat belt warning light will illuminate for approximately 6 seconds each time the POWER button is turned ON regardless of belt fastening. At this time, if the seat belt is not fastened a warning chime will sound for 6 seconds.

If you continue not to fasten the seat belt and you drive over 6 mph (9 km/h), the warning light will stay illuminated.

If you continue not to fasten the seat belt and you drive over 12 mph (20 km/h) the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink.

If you unfasten the seat belt while driving under 12 mph (20 km/h), the seat belt warning light will illuminate until the seat belt is fastened.

If you unfasten the seat belt while driving over 12 mph (20 km/h), the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink.

OFE038020N

**Front passenger's seat belt warning**

As a reminder to the front passenger, the front passenger's seat belt warning lights will illuminate for approximately 6 seconds each time the POWER button is turned ON position regardless of belt fastening.

If you continue not to fasten the seat belt and you drive over 6 mph (9 km/h), the warning light will stay illuminated.

If you continue not to fasten the seat belt and you drive over 12 mph (20 km/h) the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink.

If you unfasten the seat belt while driving under 12 mph (20 km/h) the seat belt warning light will illuminate until the seat belt is fastened.

If you unfasten the seat belt while driving over 12 mph (20 km/h), the seat belt warning chime will sound for approximately 100 seconds and the corresponding warning light will blink.

## Information

- **Although the front passenger seat is not occupied, the seat belt warning light will blink or illuminate for 6 seconds.**

  **Also, when the front passenger gets out of the vehicle while the warning is activating, the warning may continue for 6 seconds even after the passenger gets off.**
- **The front passenger's seat belt warning light may not properly operate if the front passenger does not sit properly in the seat.**
- **The front passenger's seat belt warning may operate when luggage, electronic device, etc., are placed on the front passenger seat.**

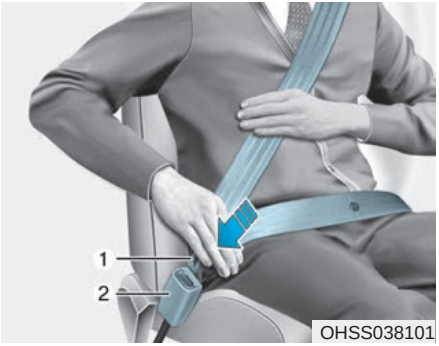
## Seat Belt Restraint System

**⚠ WARNING**

**Improperly positioned seat belts may increase the risk of serious injury in an accident. 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.**
- **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 the appropriate height.**
- **Never position the shoulder belt across your neck or face.**

### *Seat Belt-Driver's 3-point system with emergency locking retractor*




**To fasten your seat belt:**

Pull the seat belt out of the retractor and insert the metal tab (1) into the buckle (2). There will be an audible "click" when the tab locks into the buckle.

You should place the lap belt (1) portion across your hips and the shoulder belt (2) 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 will extend and move 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.

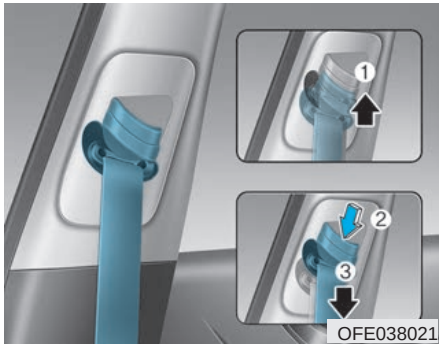
**NOTICE**

**If you are not able to smoothly pull enough of the seat belt out from the retractor, firmly pull the seat belt out and release it. After release, you will be able to pull the belt out smoothly.**

### Height adjustment

You can adjust the height of the shoulder belt anchor to one of the three different positions for maximum comfort and safety.

The shoulder portion should be adjusted so it lies across your chest and midway over your shoulder nearest the door, not over your neck.



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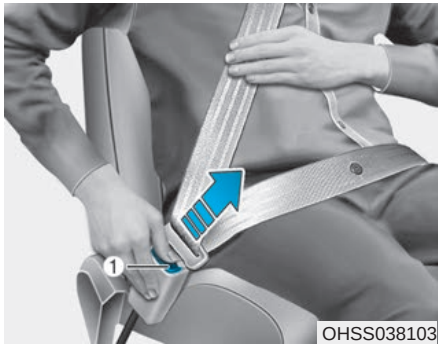
To adjust the height of the seat belt anchor, lower or raise the height adjuster into an appropriate position.

To raise the height adjuster, pull it up (1). To lower it, push it down (3) while pressing the height adjuster button (2).

Release the button to lock the anchor into position. Try sliding the height adjuster to make sure that it has locked into position.



OHSS038103

### To release your seat belt:

Press the release button (1) in the locking buckle.

When it is released, the belt should automatically draw back into the retractor. If this does not happen, check the belt to be sure it is not twisted, then try again.

### *Rear Seat Belt – Passenger's 3-point system with convertible locking retractor*

This type of seat belt combines the features of both an emergency locking retractor seat belt and an automatic locking retractor seat belt. Convertible retractor type seat belts are installed in the rear seat positions to help accommodate the installation of child restraint systems. Although a convertible retractor is also installed in the front passenger seat position, NEVER place any infant/child restraint system in the front seat of the vehicle.

**To fasten your seat belt:**

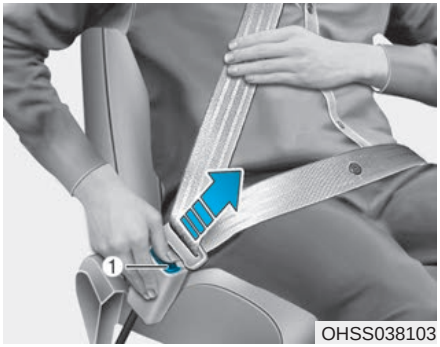
Pull the seat belt out of the retractor and insert the metal tab into the buckle. There will be an audible "click" when the tab locks into the buckle. When not securing a child restraint, the seat belt operates in the same way as the driver's seat belt (Emergency Locking Retractor Type). It automatically 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 is fully extended from the retractor to allow 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). Refer to the "Using a Child Restraint System" section in this chapter.

**NOTICE**

**Although the seat belt retractor provides the same level of protection for seated passengers in either emergency or automatic locking modes, the emergency locking mode allows seated passengers to move freely in their seat while keeping some tension on the belt. During a collision or sudden stop, the retractor automatically locks the belt to help restrain your body.**

**To deactivate the automatic locking mode, unbuckle the seat belt and allow the belt to fully retract.**



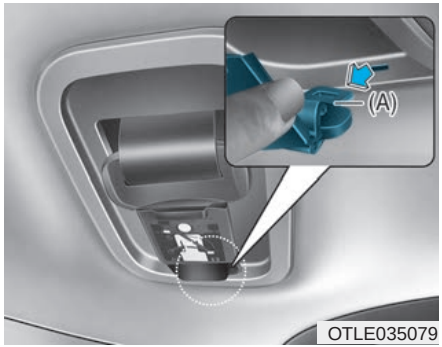
OHSS038103

**To release your seat belt:**

Press the release button (1) in the locking buckle.

When it is released, the belt should automatically draw back into the retractor. If this does not happen, check the belt to be sure it is not twisted, then try again.

### *To fasten the rear center seat belt*



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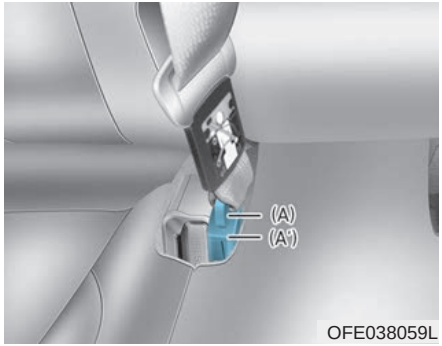

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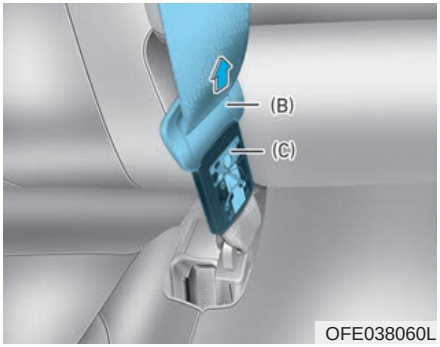
1. Extract the small tongue plate (A) from the slot on the belt assembly pocket located in the headliner.
2. Insert the small tongue plate (A) into the primary buckle (A') located on the right hand (passenger) side of the center seat. Insert the buckle until an audible "click" is heard, indicating that the latch is locked. Make sure the belt is not twisted.



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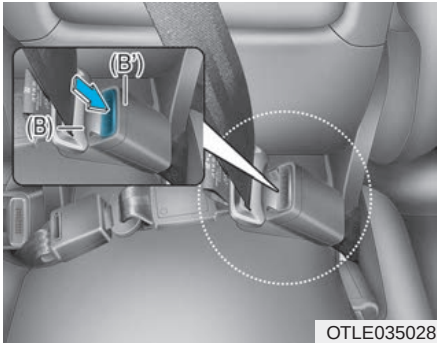


OTLE035028

3. Slip the large tongue plate (B) out of the pocket (C) located on the belt assembly.

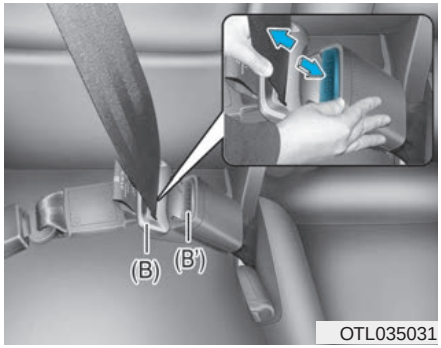
4. Pull the large tongue plate and insert it into the seat belt buckle (B') located on the left hand (driver) side of the center seat. Insert the buckle until an audible "click" is heard, indicating that the latch is locked. Make sure the belt is not twisted.

When using the rear center seat belt, the buckle with the "CENTER" mark must be used.

### Information

**If you are not able to pull out the safety belt from the retractor, firmly pull the belt out and release it. After release, you will be able to pull the belt out smoothly.**

### *To release the rear center seat-belt*



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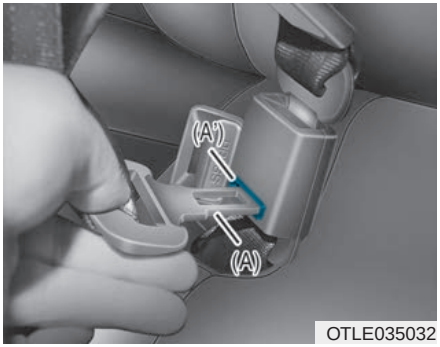
1. Press the release button on the rear center seat belt buckle (B') located on the left hand (driver) side of the center seat and remove the large tongue plate (B).



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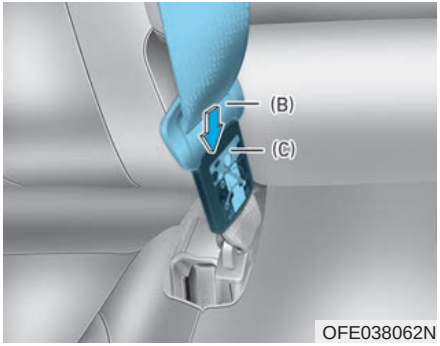

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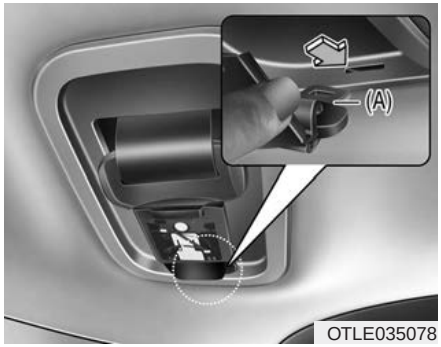
2. To release and retract the rear center seatbelt assembly, insert a small tool or key into the primary buckle release hole (A') located on the right hand (passenger) side of the center seat. You can also insert the large buckle (B) into the release hole to release the seat belt assembly.

   Pull up on the seat belt webbing and allow the webbing to retract automatically.

3. Slip the large tongue plate (B) into the pocket (C) located on the belt assembly.



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4. Insert the small tongue plate (A) into the slot on the belt assembly pocket located in the headliner.

### *Pre-tensioner seat belt (Driver and front passenger)*

Your vehicle is equipped with driver's and front passenger's Pre-tensioner Seat Belts (Retractor Pretensioner and Emergency Fastening Device System). The purpose of the pre-tensioner is to make sure the seat belts fit tightly against the occupant's body in certain frontal or side collision(s). The Emergency Fastening Device System may be activated in certain crashes where the frontal collision(s) is severe enough, together with the air bags.

When the vehicle stops suddenly, or if the occupant tries to lean forward too quickly, the seat belt retractor will lock into position. In certain frontal or side collision(s), the pre-tensioner will activate and pull the seat belt into tighter contact against the occupant's body.

(1) Retractor Pretensioner

The purpose of the retractor pretensioner is to make sure that the shoulder belts fit in tightly against the occupant's upper body in certain frontal or side collision(s).

(2) EFD (Emergency Fastening Device) System

The purpose of the Emergency Fastening Device System is to make sure that the pelvis belts fit in tightly against the occupant's lower body in certain frontal collision(s).

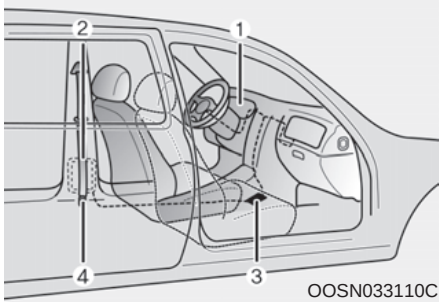
If the system senses excessive tension on the driver or passenger's seat belt when the pre-tensioner system activates, the load limiter inside the retractor pre-tensioner will release some of the pressure on the affected seat belt.

**⚠ WARNING**

- **Always wear your seat belt and sit properly in your seat.**
- **Do not use the seat belt if it is loose or twisted. A loose or twisted seat belt will not protect you properly in an accident.**
- **Do not place anything near the buckle. This may adversely affect the buckle and cause it to function improperly.**
- **Always replace your pre-tensioners after activation or an accident.**
- **NEVER inspect, service, repair or replace the pre-tensioners by yourself. This must be done by an authorized HYUNDAI dealer.**
- **Do not hit the seat belt assemblies.**

**⚠ WARNING**

**Do not touch the pre-tensioner seat belt assemblies for several minutes after they have been activated. When the pre-tensioner seat belt mechanism deploys during a collision, the pre-tensioners become hot and can burn you.**




The Pre-Tensioner Seat Belt System consists mainly of the following components. Their locations are shown in the illustration above:

1. SRS air bag warning light
2. Retractor pre-tensioner
3. SRS control module
4. EFD (Emergency Fastening Device) System

***NOTICE***

**The sensor that activates the SRS air bag is connected with the pre–tensioner seat belts. The SRS air bag warning light on the instrument panel will illuminate for approximately 6 seconds after the POWER button is placed to the ON position, and then it should turn off.**

**If the pre-tensioner is not working properly, the warning light will illuminate even if the SRS air bag is not malfunctioning. If the warning light does not illuminate, stays illuminated or illuminates when the vehicle is being driven, have an authorized HYUNDAI dealer inspect the pre-tensioner seat belts and SRS air bags as soon as possible.**

**NOTICE**

- **Both the driver's and front passenger's pre-tensioner seat belts may be activated in certain frontal or side collisions or rollovers.**
- **When the pre-tensioner 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 should not be inhaled for prolonged periods. Wash all exposed skin areas thoroughly after an accident in which the pre-tensioner seat belts were activated.**

## Additional Seat Belt Safety Precautions

### *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 line so that it fits snugly and as low as possible across the hips, not across the abdomen.

**⚠ WARNING**

- **Fasten your seat belt while sitting properly in an upright position to maximize the effectiveness of the pre-tensioner seat belt system.**
- **A pre-tensioner seat belt system is designed to activate only once. Replace the pre-tensioner seat belt system, if it was activated in an accident.**

**⚠ WARNING**

- **A pregnant woman or a patient is more vulnerable to any impacts on the abdomen during an abrupt stop or accident. If you are in an accident while pregnant, consult your doctor.**
- **To reduce the risk of serious injury or death to an unborn child during an accident, pregnant women should NEVER 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 laws which require children to travel in approved child restraint devices, including booster seats. The age at which seat belts can be used instead of child restraints differs among states, so you should be aware of the specific requirements in your state, and where you are travelling. Infant and child restraints must be properly placed and installed in a rear seat. For more information refer to the "Child Restraint Systems" section in this chapter.

**⚠ WARNING**

**ALWAYS properly restrain infants and small children in a child restraint 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. The violent forces created during an accident will tear the child from your arms and throw the child against the interior of the vehicle.**

Small children are best protected from injury in an accident 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 Federal Motor Vehicle Safety Standard FMVSS 213. The restraint must be appropriate for your child's height and weight. Check the label on the child restraint for this information. Refer to the "Child Restraint Systems" section in this chapter.

### Larger children

Children under age 13 and who are too large for a booster seat must always occupy the rear seat and use the available lap/shoulder belts. A seat belt should lie across the upper thighs and be snug across the shoulder and chest to restrain the child safely. Check belt fit periodically. Children are afforded the most safety in the event of an accident when they are restrained by a proper restraint system and/or seat belts in the rear seat. Always have the LATCH system inspected by your authorized HYUNDAI dealer after an accident. An accident can damage the LATCH system and may not properly secure the child restraint.

If a larger child over age 13 must be seated in the front seat, the child must be securely restrained by the available lap/shoulder 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 they need to be returned to an appropriate booster seat in the rear seat.

**⚠ WARNING**

- **Always make sure children are wearing their seat belts and that they are properly adjusted before driving.**
- **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.**

### *Transporting an injured person*

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

### *One person per belt*

Two people (including children) should never attempt to use a single seat belt. This could increase the severity of injuries in case of an accident.

### *Do not lie down*

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

To reduce the chance of injuries in the event of an accident and to achieve the maximum effectiveness of the restraint system, all passengers should be sitting up and the front and rear seats should be in an upright position when the car is moving.

A seat belt cannot provide proper protection if the person is lying down in the rear seat or if the front or rear seats are in a reclined position.

**⚠ WARNING**

- **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.**
- **Drivers and passengers should 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. In addition, care should be taken to assure that seat belts and belt hardware are not damaged by seat hinges, doors or other abuse.

### *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 by an authorized HYUNDAI dealer.

### *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 an accident. This should be done even if no damage is visible. Additional questions concerning seat belt operation should be directed to an authorized HYUNDAI dealer.

# CHILD RESTRAINT SYSTEM (CRS)

## Children Always in the Rear

**⚠ WARNING**

**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 air bag resulting in SERIOUS INJURY or DEATH.**

Children under age 13 must always ride in the rear seats and must always be properly restrained to minimize the risk of injury in an accident, sudden stop or sudden maneuver. According to accident statistics, children are safer when properly restrained in the rear seats than in the front seat. **Even with air bags, children can be seriously injured or killed.** Children too large for a child restraint must use the seat belts provided.

All 50 states have child restraint laws which require children to travel in approved child restraint devices. The laws governing the age or height/weight restrictions at which seat belts can be used instead of child restraints differs among states, so you should be aware of the specific requirements in your state, and where you are travelling.

Child restraint systems must be properly placed and installed in the rear seat. You must 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 lap belt portion of a lap/shoulder belt, or by a LATCH system in the rear seats of the vehicle.

### *Child restraint system (CRS)*

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

**⚠ WARNING**

**An improperly secured child restraint can increase the risk of SERIOUS INJURY or DEATH in an accident. Always take the following precautions 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 to a 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.**
- **If the vehicle head restraint prevents proper installation of a child seat (as described in the child restraint system manual), the head restraint of the respective seating position shall be readjusted or entirely removed.**
- **Do not use an infant carrier or a child safety seat that "hooks" over a seatback, it may not provide adequate protection in an accident.**
- **After an accident, have a HYUNDAI dealer check the child restraint system, seat belts, tether anchors and lower anchors.**

## Selecting a Child Restraint System (CRS)

When selecting a CRS for your child, always:

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

### *Child restraint system types*

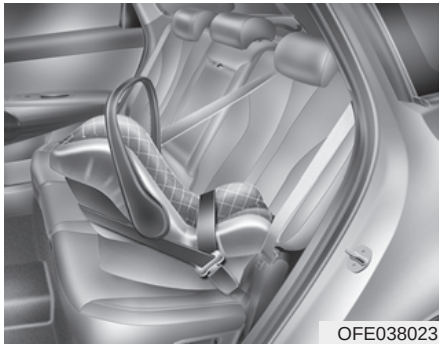
There are three main types of child restraint systems: rearward-facing seats, forward-facing seats, and booster seats. They are classified according to the child's age, height and weight.

#### Rearward-facing child seats

**⚠ WARNING**

**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.**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A rearward-facing child seat 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 seat and reduce the stress to the neck and spinal cord.

All children under age one must always ride in a rearward-facing infant child restraint.

Convertible and 3-in-1 child seats 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.

Continue to use a rearward-facing child seat for as long as your child will fit within the height and weight limits allowed by the child seat manufacturer. It's the best way to keep them safe. Once your child has outgrown the rearward-facing child restraint, your child is ready for a forward-facing child restraint with a harness.

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### Forward-facing child restraints

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

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

### Booster seats

A booster seat is a restraint 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 child in a booster seat until they are big enough to sit in the seat without a booster and still have the seat belt fit 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 ride in the rear seats and must always be properly restrained to minimize the risk of injury.

## Installing a Child Restraint System (CRS)

**⚠ WARNING**

**Before installing your child restraint system always:**

- **Read and follow the instructions provided by the manufacturer of the child restraint.**
- **Read and follow the instructions regarding child restraint systems in this manual.**

**Failure to follow all warnings and instructions could increase the risk of the SERIOUS INJURY or DEATH if an accident occurs.**

**⚠ WARNING**

**If the vehicle head restraint prevents proper installation of a child seat (as described in the child seat system manual) the head restraint of the respective seating position shall be readjusted or entirely removed.**

After selecting a proper child seat for your child, check to make sure it fits properly in your vehicle. Follow the instructions provided by the manufacturer when installing the child seat. Note these general steps when installing the seat to your vehicle:

- **Properly secure the child restraint to the vehicle.** All child restraints must be secured to the vehicle with the lap part of a lap/shoulder belt or with the LATCH system. If using the lap/shoulder belt for your child restraint, the convertible locking retractor should be pulled all the way out to engage the "automatic locking" mode. (See page 2-43.)
- **Make sure the child restraint is firmly secured.** After installing a child restraint to the vehicle, push and pull the seat forward-and-back and side-to-side to verify that it is securely attached to the seat. A child restraint secured with a seat belt should be installed as firmly as possible. However, some side-to-side movement can be expected.
- **Secure the child in the child restraint.** Make sure the child is properly strapped in the child restraint according to the manufacturer instructions.

**⚠ CAUTION**

**A child restraint in a closed vehicle can become very hot. To prevent burns, check the seating surface and buckles before placing your child in the child restraint.**

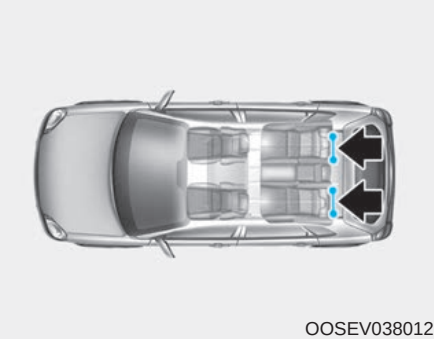
### *Lower Anchors and Tether for Children (LATCH System)*

The LATCH system holds a child restraint during driving and in an accident. This system is designed to make installation of the child restraint easier and reduce the possibility of improperly installing your child restraint. The LATCH system uses anchors in the vehicle and attachments on the child restraint. The LATCH system eliminates the need to use seat belts to secure the child restraint to the rear seats.

Lower anchors are metal bars built into the vehicle. There are two lower anchors for each LATCH seating position that will accommodate a child restraint with lower attachments.

To use the LATCH system in your vehicle, you must have a child restraint with LATCH attachments.

The child seat manufacturer will provide you with instructions on how to use the child seat with its attachments for the LATCH lower anchors.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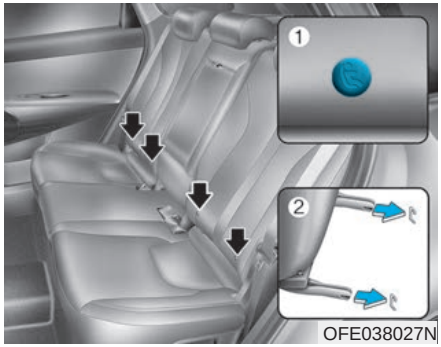
LATCH anchors have been provided in the left and right outboard rear seating positions. Their locations are shown in the illustration. There are no LATCH anchors provided for the center rear seating position.

**⚠ WARNING**

**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. Using the outboard seat anchors can damage the anchors which may break or fail in a collision resulting in serious injury or death.**



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[1] : Lower Anchor Position Indicator,
[2] : Lower Anchor

The lower anchor position indicator symbols are located on the left and right rear seat backs to identify the position of the lower anchors in your vehicle (see arrows in illustration).

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

### *Securing a child restraint with the LATCH anchors system*

To install a LATCH-compatible child restraint 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 anchors that could prevent a secure connection between the child restraint and the lower anchors.
3. Place the child restraint on the vehicle seat, then attach the seat to the lower anchors according to the instructions provided by the child restraint manufacturer.
4. Follow the child restraint instructions for properly adjusting and tightening the lower attachments on the child restraint to the lower anchors.

**⚠ WARNING**

**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 to a single anchor. This could cause the anchor or attachment to come loose or break.**
- **Always have the LATCH system inspected by your authorized HYUNDAI dealer after an accident. An accident can damage the LATCH system and may not properly secure the child restraint.**

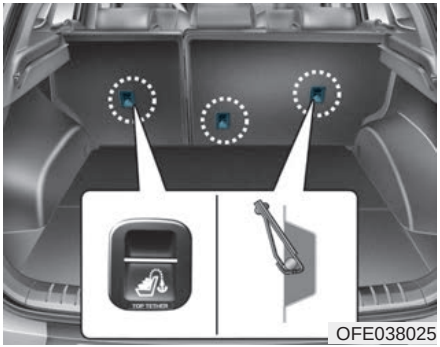
***NOTICE***

**The recommended weight for the LATCH system is under 65 lb (30 kg).**

**How to determine an appropriate child restraint weight:**

**Child weight + Child restraint weight < 65 lb (30kg)**

### *Securing a child restraint seat with "Tether Anchor" system*



OFE038025

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.

Child restraint hook holders are located on the rear of the seatbacks.

**⚠ WARNING**

**Take the following precautions when installing the tether strap:**

- **Read and follow all installation instructions provided with your child restraint system.**
- **NEVER attach more than one child restraint to a single tether anchor. This could cause the anchor or attachment to come loose or break.**
- **Do not attach the tether strap to anything other than the correct tether anchor. It may not work properly if attached to something else.**
- **Do not use the tether anchors for adult seat belts or harnesses, or for attaching other items or equipment to the vehicle.**

OFE038026

To install the tether anchor:

1. Route the child restraint tether strap over the child restraint 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 tether strap according to the child seat manufacturer's instructions to firmly secure the child restraint to the seat.
3. Check that the child restraint is securely attached to the seat by pushing and pulling the seat forward-and-back and side-to-side.

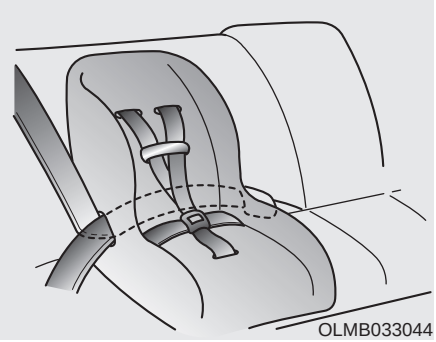
### *Securing a child restraint with lap/shoulder belt*

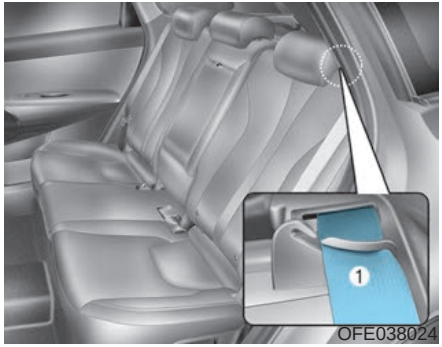
When not using the LATCH system, all child restraints must be secured to a vehicle rear seat with the lap part of a lap/shoulder belt.

**⚠ WARNING**

**ALWAYS place a rear-facing child restraint in the rear seat of the vehicle.**

**Placing a rear-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.**




**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.

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 secure a child restraint system, use the following procedure.

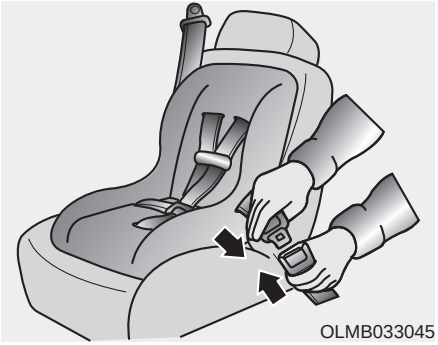
To install a child restraint system on the rear seats, do the following:

1. Place the child restraint system on a rear seat and route the lap/ shoulder belt around or through the child restraint, following the restraint manufacturer's instructions.

   Be sure the seat belt webbing is not twisted. Make sure to insert the belt into the guide(1).

**NOTICE**

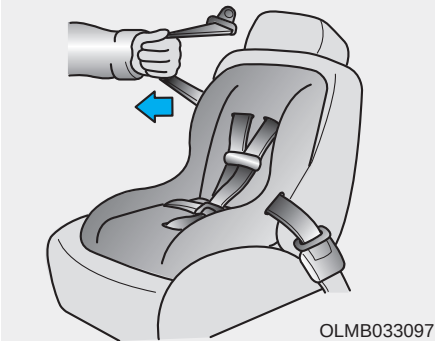
**When using the rear center seat belt, you should also refer to the "Rear Seat Belt – Passenger's 3-point system" section in this chapter.**


OLMB033045

2. Fasten the lap/shoulder belt latch into the buckle. Listen for the distinct "click" sound.

### Information

**Position the release button so that it is easy to access in case of an emergency.**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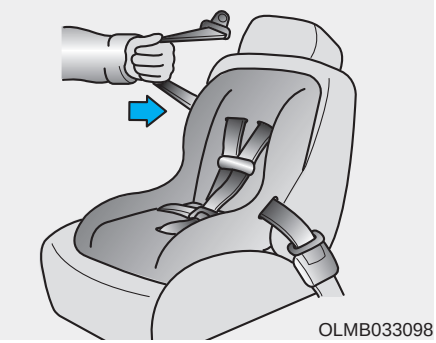
3. Pull the shoulder portion of the seat belt all the way out. When the shoulder portion of the seat belt is fully extended, it will shift the retractor to the "Automatic Locking" (child restraint) mode.




4. Slowly allow the shoulder portion of the seat belt to retract and listen for an audible "clicking" or "ratcheting" sound. This indicates that the retractor is in the "Automatic Locking" mode. If no distinct sound is heard, repeat steps 3 and 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 steps 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.

If your CRS manufacturer instructs or recommends you to use a tether anchor with the lap/shoulder belt, refer to the previous pages for more information.

**NOTICE**

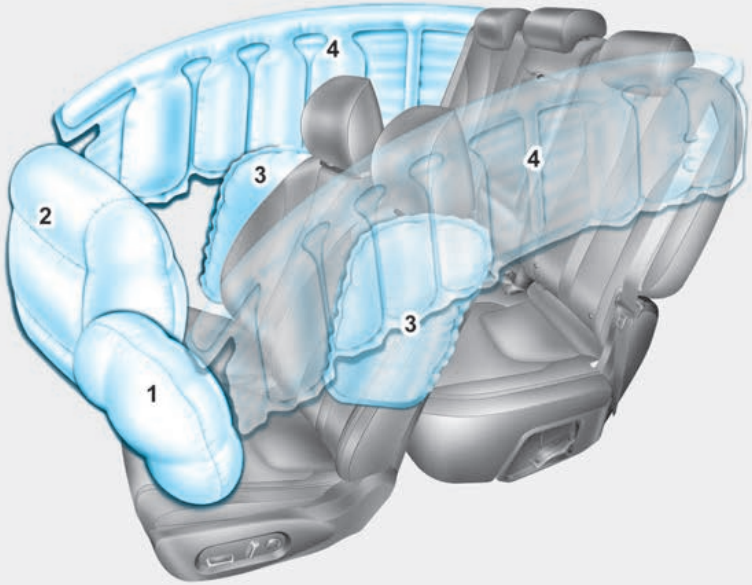
**When the seat belt is allowed to retract to its fully stowed position, the retractor will automatically switch from the "Automatic Locking" mode to the emergency lock mode for normal adult usage.**

**⚠ WARNING**

**If the retractor is not in the "Automatic Locking" mode, the child restraint can move when your vehicle turns or stops suddenly. A child can be seriously injured or killed if the child restraint is not properly anchored in the car, including manually pulling the seat belt all the way out to shift the rectractor to the "Automatic Locking" mode.**

To remove the child restraint, press the release button on the buckle and then pull the lap/shoulder belt out of the restraint and allow the seat belt to retract fully.

# AIR BAG - ADVANCED SUPPLEMENTAL RESTRAINT SYSTEM




1. Driver's front air bag
2. Passenger's front air bag
3. Side air bag
4. Curtain air bag

**The actual air bags in the vehicle may differ from the illustration.**

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This vehicle is equipped with an Advanced Supplemental Air Bag System for the driver's seat and front passenger's seats.

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

You can be severely injured or killed in an accident if you are not wearing a seat belt. Air bags are designed to supplement seat belts, but do not replace them. Also, air bags are not designed to deploy in every collision. In some accidents, the seat belts are the only restraint protecting you.

**⚠ WARNING**

**AIR BAG SAFETY PRECAUTIONS**

**ALWAYS use seat belts and child restraints - every trip, every time, everyone! Even with air bags, you can be seriously injured or killed in a collision if you are improperly belted or not wearing your seat belt when the air bag inflates.**

**NEVER place a child in any child restraint or booster seat in the front passenger seat. An inflating air bag 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.**

**All occupants should 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 is turned off. If an occupant is out of position during an accident, the rapidly deploying air bag may forcefully contact the occupant causing serious or fatal injuries.**

**You and your passengers should never sit or lean unnecessarily close to the air bags or lean against the door or center console.**

**Move your seat as far back as possible from front air bags, while still maintaining control of the vehicle. The U.S. National Highway Traffic Safety Administration (NHTSA) recommends that drivers allow at least 10 inches (25 cm) between the center of the steering wheel and the chest.**

## Where Are the Air Bags?

### *Driver's and passenger's front air bags*

Your vehicle is equipped with a Advanced Supplemental Restraint System (SRS) and lap/shoulder belts at both the driver and passenger seating positions.

The SRS consists of air bags which are located in the center of the steering wheel, and the passenger's side front panel pad above the glove box.

The air bags are labeled with the letters "AIR BAG" embossed on the pad covers.

■ Driver's front air bag

■ Passenger's front air bag

The purpose of the SRS is to provide the vehicle's driver and front passengers with additional protection than that offered by the seat belt system alone.

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

According to the impact severity, the SRS Control Module (SRSCM) controls the air bag inflation. Failure to properly wear seat belts can increase the risk or severity of injury in an accident.

**⚠ WARNING**

**To reduce the risk of serious injury or death from an inflating front air bags, take the following precautions:**

- **Seat belts must be worn at all times to help keep occupants positioned properly.**
- **Move your seat as far back as possible from front air bags, while still maintaining control of the vehicle.**
- **Never lean against the door or center console.**

- **Do not allow the front passenger to place their feet or legs on the dashboard.**
- **No objects (such as crash pad cover, cellular phone holder, cup holder, air fresheners or stickers) should be placed over or near the air bag modules on the steering wheel, instrument panel, windshield glass, and the front passenger's panel above the glove box. Such objects could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.**

### *Side air bags*

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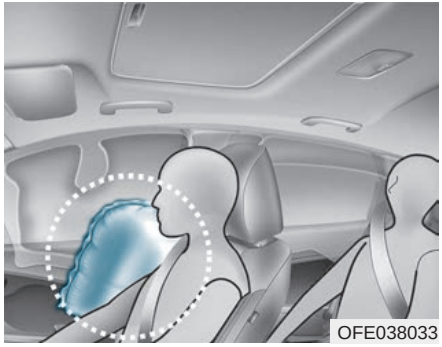
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Your vehicle is equipped with a side air bag in each front seat. The purpose of the air bag is to provide the vehicle's driver and the front passenger with additional protection than that offered by the seat belt alone.

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

The side and curtain air bags on both sides of the vehicle may deploy if a rollover or possible rollover is detected.

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

**⚠ WARNING**

**To reduce the risk of serious injury or death from an inflating side air bag, take the following precautions:**

- **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.**
- **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 use any accessory seat covers. This could reduce or prevent the effectiveness of the system.**
- **Do not place any objects over the air bag or between the air bag and yourself. Also, do not attach any objects around the area the air bag inflates such as the door, side door glass, front and rear pillar.**
- **Do not place any objects between the door and the seat. They may become dangerous projectiles if the side air bag inflates.**

- **Do not install any accessories on the side or near the side air bags.**
- **Do not put any objects between the side airbag label and seat cushion. It could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.**
- **Do not cause impact to the doors when the POWER button is placed to the ON position as this may cause the side air bags to inflate.**
- **If the seat or seat cover is damaged, have the vehicle checked and repaired by an authorized HYUNDAI dealer.**

### *Curtain air bags*

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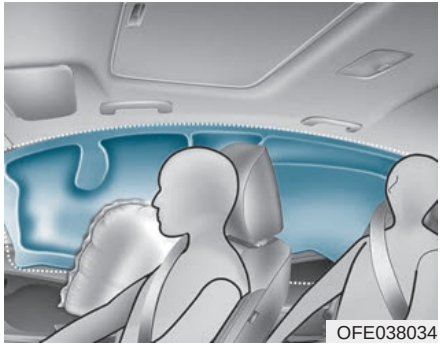
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Curtain air bags are located along both sides of the roof rails above the front and rear doors.

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

The side and curtain air bags on both sides of the vehicle may deploy if a rollover or possible rollover is detected.

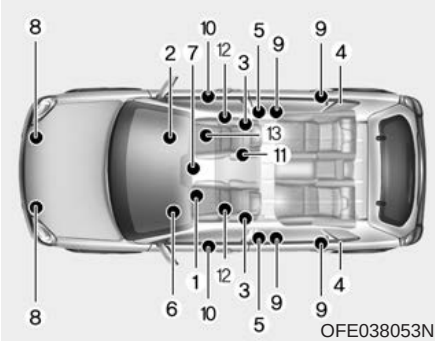
The curtain air bags are not designed to deploy in all side impact or rollover situations.

**⚠ WARNING**

**To reduce the risk of serious injury or death from an inflating curtain air bag, take the following precautions:**

- **All seat occupants must wear seat belts at all times to help keep occupants positioned properly.**
- **Properly secure child restraints as far away from the door as possible.**
- **Do not place any objects over the air bag. Also, do not attach any objects around the area the air bag inflates such as the door, side door glass, front and rear pillar, roof side rail.**
- **Do not hang other objects except clothes, especially hard or breakable objects. In an accident, it may cause vehicle damage or personal injury.**
- **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 attempt to open or repair the side curtain air an authorized HYUNDAI dealer.**

## How Does the Air Bag System Operate?




The SRS consists of the following components:

1. Driver's front air bag module
2. Passenger's front air bag module
3. Side air bag modules
4. Curtain air bag modules
5. Retractor pre-tensioner
6. Air bag warning light
7. SRS control module (SRSCM)/ Rollover sensor
8. Front impact sensors
9. Side impact sensors

10. Side pressure sensors
11. Seat belt buckle sensor
12. Emergency Fastening Device System
13. Occupant classification system

The SRSCM (Supplemental Restraint System Control Module) continually monitors all SRS components while the POWER button is placed to the ON position to determine if a crash impact is severe enough to require air bag deployment or pre-tensioner seat belt deployment.

### SRS warning light

The SRS (Supplement Restraint System) air bag warning light on the instrument panel displays the air bag symbol depicted in the illustration. The system checks the air bag electrical system for malfunctions. The light indicates that there is a potential malfunction with your air bag system, which could include your side and curtain air bags used for rollover protection.

**⚠ WARNING**

**If your SRS malfunctions, the air bag may not inflate properly during an accident, increasing the risk of serious injury or death.**

**If any of the following conditions occur, your SRS is malfunctioning:**

- **The light does not turn on for approximately six seconds when the POWER button is in the ON position.**
- **The light stays on after illuminating for approximately six seconds.**
- **The light comes on when the vehicle is ON.**
- **The light blinks when the vehicle is ON.**

**Have an authorized HYUNDAI dealer inspect the SRS as soon as possible if any of these conditions occur.**

During a frontal collision, sensors will detect the vehicle's deceleration. If the rate of deceleration is high enough, the control unit will inflate the front air bags.

The front air bags 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 air bags help provide protection in the event of a side impact or rollover.

- Air bags are activated (able to inflate if necessary) only when the POWER button is placed to the ON position.
- Air bags inflate in the event of certain frontal or side collisions to help protect the occupants from serious physical injury.
- Generally, air bags are designed to inflate based upon the severity of a collision, its direction, etc. These two factors determine whether the sensors produce an electronic deployment/inflation signal.
- The front air bags will completely inflate and deflate in an instant. It is virtually impossible for you to see the air bags inflate during an accident. It is much more likely that you will simply see the deflated air bags hanging out of their storage compartments after the collision.
- In addition to inflating in certain side collisions, vehicles equipped with a rollover sensor, side and curtain air bags will inflate if the sensing system detects a rollover.

  When a rollover is detected, side and curtain air bags will remain inflated longer to help provide protection from ejection, especially when used in conjunction with the seat belts.
- To help provide protection, the air bags must inflate rapidly. The speed of air bag inflation is a consequence of extremely short time in which to inflate the air bag 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 air bag design.

  However, the rapid air bag inflation can also cause injuries which can include facial abrasions, bruises and broken bones because the inflation speed also causes the air bags to expand with a great deal of force.
- There are even circumstances under which contact with the air bag can cause fatal injuries, especially if the occupant is positioned excessively close to the air bag.

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

**⚠ WARNING**

**To reduce the risk of serious injury or death from an inflating air bag, take the following precautions:**

- **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 maintaining 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 air bag and the seat occupant.**
- **Do not allow the front passenger to place their feet or legs on the dashboard.**

■ Driver's front air bag (1)

When the SRSCM detects a sufficiently severe impact to the front of the vehicle, it will automatically deploy the front air bags.

■ Driver's front air bag (2)

Upon deployment, tear seams molded directly into the pad covers will separate under pressure from the expansion of the air bags. Further opening of the covers allows full inflation of the air bags.

A fully inflated air bag, in combination with a properly worn seat belt, slows the driver or the front passenger forward motion, reducing the risk of head and chest injury.

■ Driver's front air bag (3)

■ Passenger's front air bag

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

**⚠ WARNING**

**To prevent objects from becoming dangerous projectiles when the passenger's air bag 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 air bag 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 Air Bag Inflates

After a frontal or side air bag inflates, it will deflate very quickly. Air bag inflation will not prevent the driver from seeing out of the windshield or being able to steer. Curtain air bags may remain partially inflated for some time after they deploy.

**⚠ WARNING**

**After an air bag inflates, take the following precautions:**

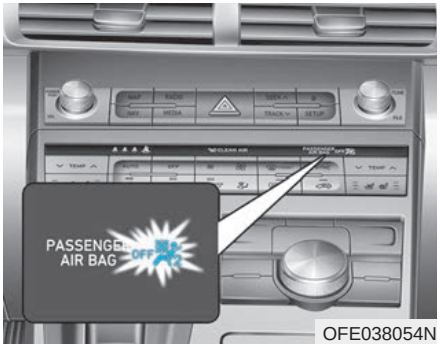
- **Open your windows and doors as soon as possible after impact to reduce prolonged exposure to the smoke and powder released by the inflating air bag.**
- **Do not touch the air bag storage area's internal components immediately after an air bag has inflated. The parts that come into contact with an inflating air bag may be very hot.**
- **Always wash exposed skin areas thoroughly with cold and mild soap.**
- **Always have an authorized HYUNDAI dealer replace the air bag immediately after deployment. Air bags are designed to be used only once.**

### *Noise and smoke from inflating air bag*

When the air bags inflate, they make a loud noise and may produce smoke and powder in the air inside of the vehicle. This is normal and is a result of the ignition of the air bag inflator. After the air bag inflates, you may feel substantial discomfort in breathing because of the contact of your chest with both the seat belt and the air bag, as well as from breathing the smoke and powder. The powder may aggravate asthma for some people. If you experience breathing problems after an air bag deployment, seek medical attention immediately.

Though the smoke and powder are nontoxic, they 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.

## Occupant Classification System (OCS)



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Your vehicle is equipped with an Occupant Classification System (OCS) in the front passenger's seat.

### *Main components of the Occupant Classification System*

- A detection device located within the front passenger seat cushion.
- Electronic system to help determine whether the passenger air bag systems should be activated or deactivated.
- An indicator light located on the overhead console which illuminates the words "PASSENGER AIR BAG OFF" indicating the front passenger air bag system is deactivated.
- The overhead console air bag indicator light is interconnected with the OCS.

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

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

For example, if a child restraint of the type specified in the regulations is on the seat, the occupant classification sensor can detect it and cause the air bag to turn OFF.

Front passenger seat adult occupants who are properly seated and wearing the seat belt properly, should not cause the passenger air bag to be automatically turned OFF. For small adults it may be turned OFF, however, if the occupant does not sit in the seat properly (for example, by not sitting upright, by sitting on the edge of the seat, or by otherwise being out of position), this could cause the sensor to turn the air bag OFF.

You will find the "PASSENGER AIR BAG OFF" indicator on the center fascia panel. This system detects the conditions 1-4 in the following table and activates or deactivates the front passenger air bag based on these conditions.

Always be sure that you and all vehicle occupants are seated properly and wearing the seat belt properly for the most effective protection by the air bag and the seat belt.

The OCS may not function properly if the passenger takes actions which can affect the classification system. These include:

- Failing to sit in an upright position.
- Leaning against the door or center console.
- Sitting towards the sides of the front of the seat.
- Putting their legs on the dashboard or resting them on other locations which reduce the passenger weight on the front seat.
- Wearing the seat belt improperly.
- Reclining the seatback.
- Wearing a thick cloth like ski wear or hip protection wear.
- Putting an additional thick cushion on the seat.
- Putting electrical devices (for example, notebook, satellite radio) on the seat with inverter charging.

### Condition and operation in the front passenger Occupant Classification System

| Condition detected by the occupant classification system | Indicator/Warning light | | Devices |
|---|---|---|---|
| | "PASSENGER AIR BAG OFF" indicator light | SRS warning light | Front passenger air bag |
| 1. Adult *1 | Off | Off | Activated |
| 2. Infant *2 or child restraint system with 12 months old *3 *4 | On | Off | Deactivated |
| 3. Unoccupied | On | Off | Deactivated |
| 4. Malfunction in the system | Off | On | Activated |

*1 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.

*2 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 upon his/her physique or sitting position.

*3 Never install a child restraint system on the front passenger seat.

*4 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.**

- **NEVER ride with the seat-back reclined when the vehicle is moving.**

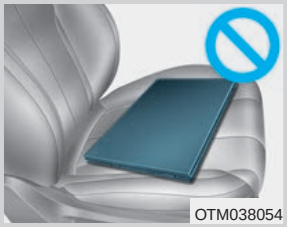
- **NEVER place your feet on the front passenger seat-back.**

- **NEVER place your feet or legs on the dashboard.**

- **NEVER sit with your hips shifted towards the front of the seat.**

- **NEVER lean on the door or center console or sit on one side of the front passenger seat.**

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



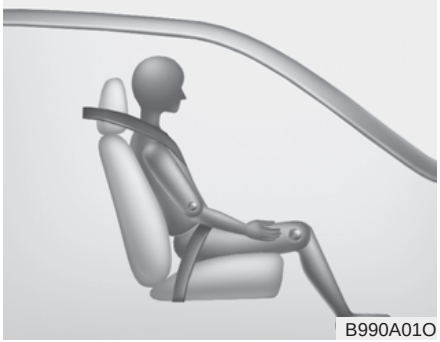

- Do not place electronic devices such as laptops, DVD player, or conductive materials such as water bottles on the passenger seat.
- Do not use electronic devices such as laptops and satellite radios which use inverter chargers.

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

- If large quantity of liquid has been spilled on the passenger seat, the air bag warning light may illuminate or malfunction.

  Therefore, make sure the seat has been completely dried before driving the vehicle.

- 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.
- 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 when in collision. Any of the above could interfere with the proper operation of the OCS sensor thereby increasing the risk of an injury in an accident.




**Proper seated position for OCS**

If the "PASSENGER AIR BAG OFF" indicator is on when an adult is seated in the front passenger seat, place the POWER button in the OFF position and ask the passenger to sit properly (sitting upright with the seat back in an upright position, centered on the seat cushion with their seat belt on, legs comfortably extended and their feet on the floor). Restart the vehicle and have the person remain in that position. This will allow the system to detect the person and to enable the passenger air bag. If the "PASSENGER AIR BAG OFF" indicator is still on, ask the passenger to move to the rear seat.

**⚠ 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 air bag will not inflate if the indicator is illuminated. Have your passenger reposition himself in the seat. If the "PASSENGER AIR BAG OFF" indicator remains illuminated after the passenger repositions himself properly and the vehicle is restarted, have the passenger move to the rear seat because the air bag will not inflate.**

***NOTICE***

**The "PASSENGER AIR BAG OFF" indicator illuminates for approximately 4 seconds after the POWER button is in the ON position or after the vehicle is started. If the front passenger seat is occupied, the OCS will then classify the front passenger after several more seconds.**

### *Do Not Install a Child Restraint in the Front Passenger's Seat*

Even though your vehicle is equipped with the OCS, never install a child restraint in the front passenger's seat. An inflating air bag can forcefully strike a child or child restraint resulting in serious or fatal injury.

**⚠ WARNING**

- **NEVER place a rear-facing or front-facing child restraint in the front passenger's seat of the vehicle.**
- **An inflating frontal air bag could forcefully strike a child resulting in serious injury or death.**
- **Always properly restrain children in an appropriate child restraint in the rear seat of the vehicle.**

## Why Didn't My Air Bag Go Off in a Collision?

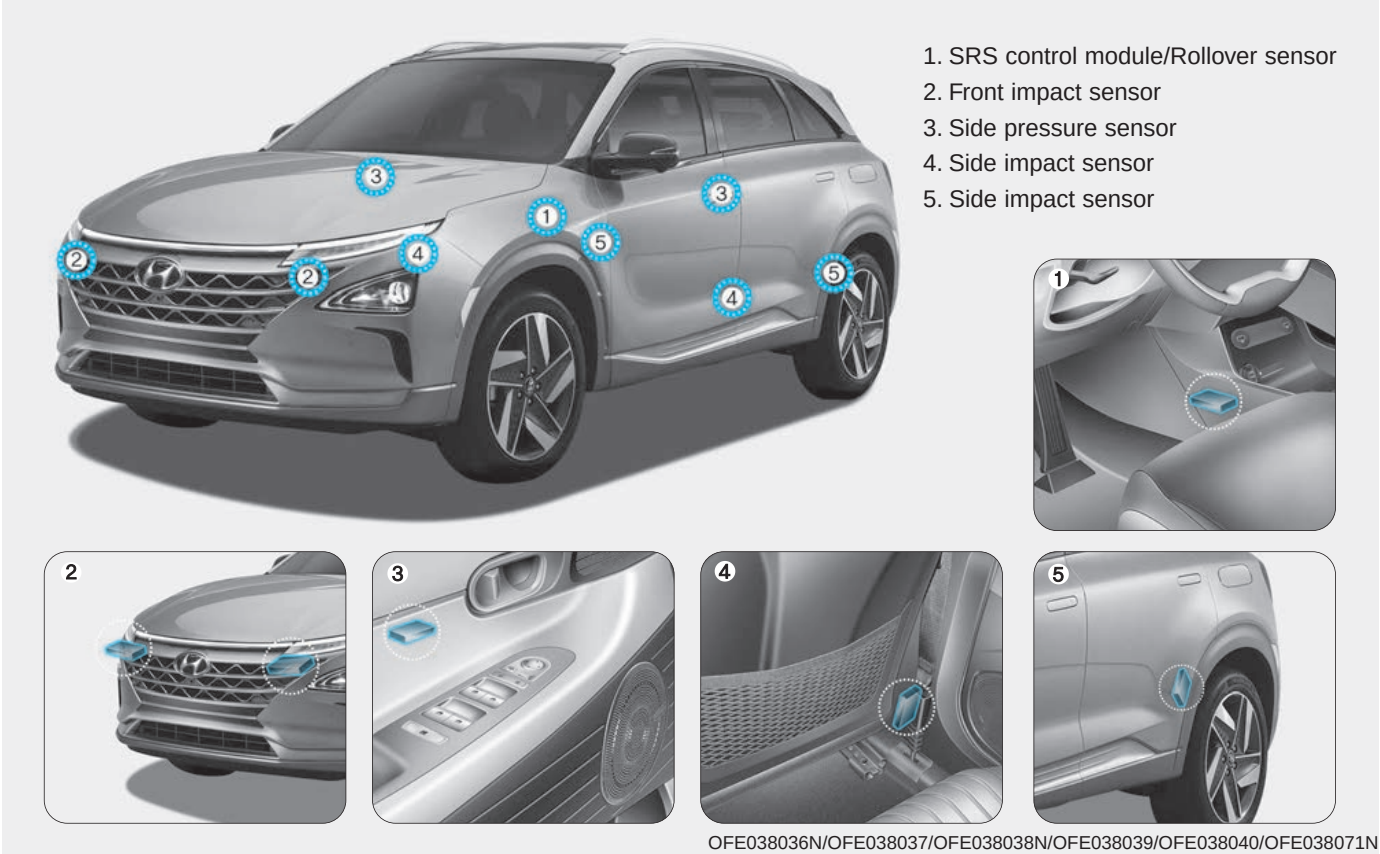
Air bags are not designed to inflate in every collision. There are certain types of accidents in which the air bag would not be expected to provide additional protection. These include rear impacts, second or third collisions in multiple impact accidents, as well as low speed impacts. Damage to the vehicle indicates collision energy absorption, and is not an indicator of whether or not an air bag should have inflated.

### *Air bag collision sensors*

**⚠ WARNING**

**To reduce the risk of an air bag deploying unexpectedly and causing serious injury or death:**

- **Do not hit or allow any objects to impact the locations where air bags or sensors are installed.**
- **Do not perform maintenance on or around the air bag sensors. If the location or angle of the sensors is altered, the air bags may deploy when they should not or may not deploy when they should.**
- **Do not install bumper guards or replace the bumper with a non-genuine HYUNDAI parts. This may adversely affect the collision and air bag deployment performance.**
- **Place the POWER button to the OFF position when the vehicle is being towed to prevent inadvertent air bag deployment.**
- **Have all air bag repairs performed by an authorized HYUNDAI dealer.**

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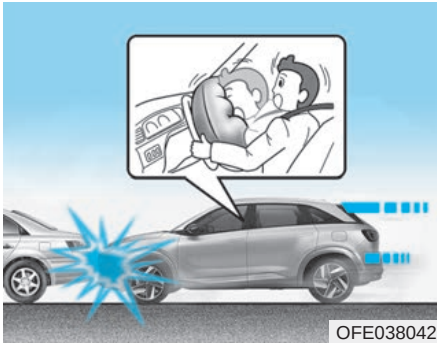
### *Air bag inflation conditions*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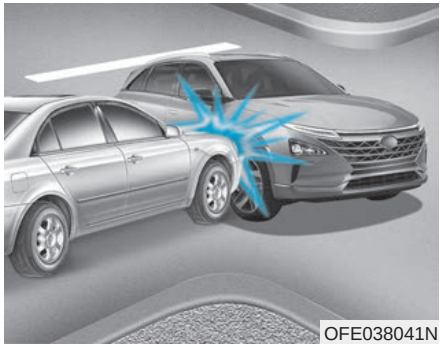
**Front air bags**

Front air bags are designed to inflate in some frontal collisions depending on the severity of impact of the front collision.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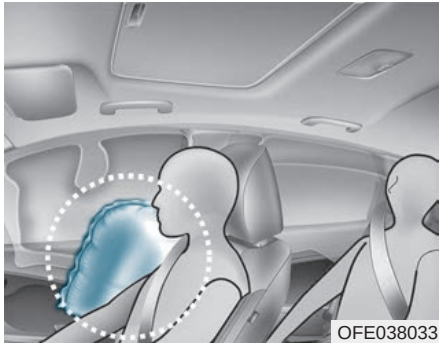
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**Side and curtain air bags**

Side and curtain air bags 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 air bags are designed to inflate only in frontal collisions, they also may inflate in other types of collisions if the front impact sensors detect a sufficient impact. Side and curtain air bags are designed to inflate only in side impact collisions or rollover situations, but they may inflate in other collisions if the side impact sensors detect a sufficient impact.

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

### *Air bag non-inflation conditions*

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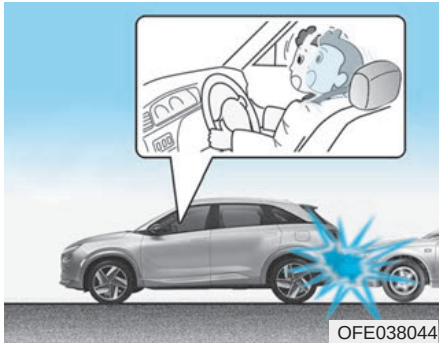
In certain low-speed collisions the air bags may not deploy. The air bags are designed not to deploy in such cases because they may not provide benefits beyond the protection of the seat belts.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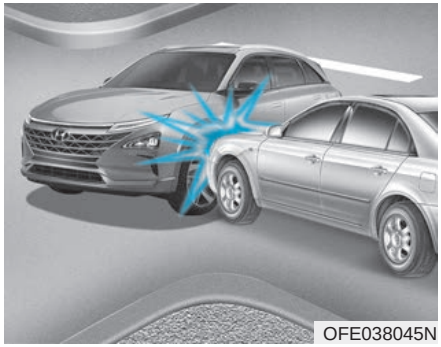
Front air bags are not designed to inflate in rear collisions, because occupants are moved backward by the force of the impact. In this case, inflated air bags would not provide any additional benefit.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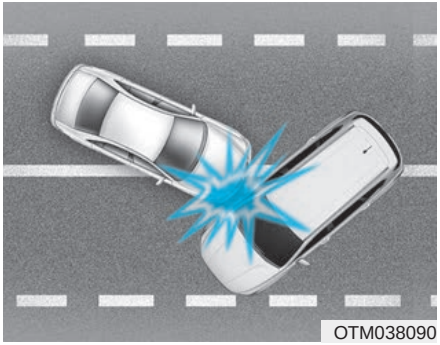
Front air bags may not inflate in side impact collisions, because occupants move in the direction of the collision, and thus in side impacts, front air bag deployment would not provide additional occupant protection.

However, side and curtain air bags may inflate depending on the severity of impact.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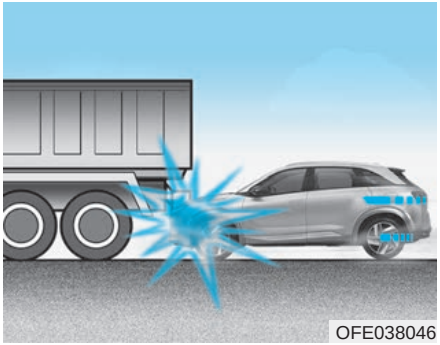
In an angled collision, the force of impact may direct the occupants in a direction where the air bags would not be able to provide any additional benefit, and thus the sensors may not deploy any air bags.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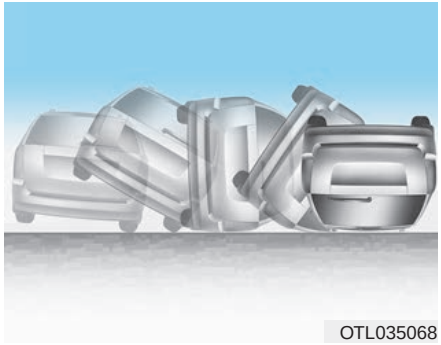
Just before impact, drivers often brake heavily. Such heavy braking lowers the front portion of the vehicle causing it to "ride" under a vehicle with a higher ground clearance. Air bags may not inflate in this "underride" situation because deceleration forces that are detected by sensors may be significantly reduced by such "underride" collisions.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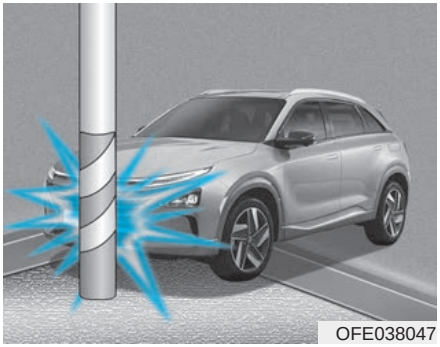
Front air bags may not inflate in rollover accidents because air bag deployment could not provide protection to the occupants.

However, side and curtain air bags may inflate when the vehicle is rolled over by a side impact collision.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Air bags 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.

## SRS Care

The SRS is virtually maintenance-free and there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate when the POWER button is in the ON position, or continuously remains on, have your vehicle 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 must be performed by an authorized HYUNDAI dealer. Improper handling of the SRS system may result in serious personal injury.

**⚠ WARNING**

**To reduce the risk of serious injury or death, take the following precautions:**

- **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 air bag modules on the steering wheel, instrument panel, or the front passenger's panel above the glove box.**
- **Clean the air bag pad covers with a soft cloth moistened with plain water. Solvents or cleaners could adversely affect the air bag covers and proper deployment of the system.**
- **Always have inflated air bags replaced by an authorized HYUNDAI dealer.**

- **If components of the air bag system must be discarded, or if the vehicle must be scrapped, certain safety precautions must be observed. Consult an authorized HYUNDAI dealer for the necessary information. Failure to follow these precautions could increase the risk of personal injury.**

## Additional Safety Precautions

**Passengers should not move out of or change seats while the vehicle is moving.** A passenger who is not wearing a seat belt during a crash 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 crash.

**Do not modify the front seats.**

Modification of the front seats could interfere with the operation of the supplemental restraint system sensing components or side air bags.

**Do not place items under the front seats.** Placing items under the front seats could interfere with the operation of the supplemental restraint system sensing components and wiring harnesses.

**Do not cause impact to the doors.** Impact to the doors when the POWER button is in the ON position may cause the air bags 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.

### *Adding equipment to or modifying your air bag 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 air bag system.

## Air Bag Warning Labels

Air bag warning labels, required by the U.S. National Highway Traffic Safety Administration (NHTSA), are attached to alert the driver and passengers of potential risks of the air bag system. Be sure to read all of the information about the air bags that are installed on your vehicle in this Owners Manual.

# ACTIVE HOOD LIFT SYSTEM (IF EQUIPPED)

The active hood lift system can help reduce risk of injury to pedestrians by raising the hood in certain accident situations. The active hood lift system has the additional deformation space under the hood, which is made available for subsequent head impact.

## System activation

### *Prerequisite for activation*

The POWER button is in the START position and the vehicle speed is between about 15.5 mph (25 km/h) and 31 mph (50 km/h).

**Information**

**- Active hood lift system repair**

- **If the active hood lift system has been activated, do not place the hood back by yourself. Have the system repaired by an authorized HYUNDAI dealer.**
- **If you change or repair the front bumper, have the system checked by an authorized HYUNDAI dealer.**

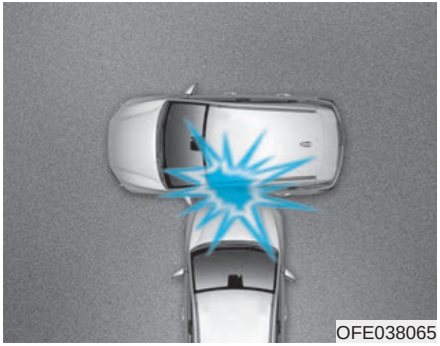
### *System activation*

The active hood lift system is designed to work in a frontal collision depending on the intensity, speed or angles of impact of the front collision.

The system will activate when:

- There is a frontal collision with a pedestrian, an animal, an obstacle or a vehicle and certain operation conditions (intensity, speed, angle of impact, etc.) are met.

## System limitation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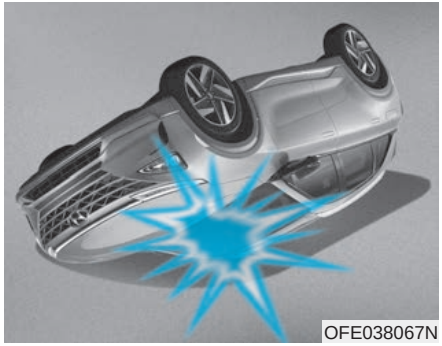
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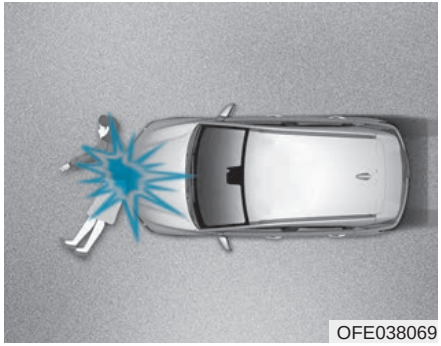
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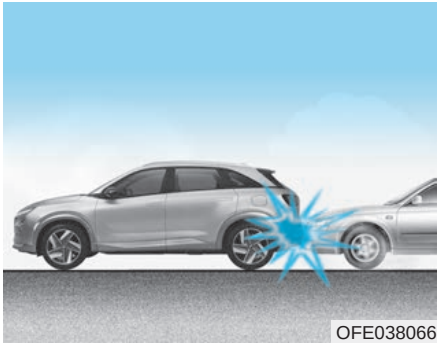
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The system will not activate when:

- On side collisions, rear collision, and rollover accident. The vehicle can detect only frontal collision.
- The front bumper is damaged or modified.
- The vehicle is in an angled frontal collision with pedestrians.
- A pedestrian is laying on the road.
- A pedestrian has an object to absorb the shock such as a suit case, buggy or cart.

## System malfunction

OIK037067L

If there is a problem with the system a message will appear on the cluster display.

This warning message means that the protection of pedestrians by the active hood lift system is not working properly.

If the warning message is displayed, have the system checked as soon as possible by an authorized HYUNDAI dealer.

### Information

- **Do not remove or change the components and the wiring of the active hood system.**
- **Do not change the front bumper or the body structure.**
- **Do not install or assemble any aftermarket accessory on the front bumper or cover.**
- **When replacing tires, make sure they are the same size as your original tires. If you drive with different tire or wheel sizes, the active hood lift system may not work normally.**

**The above situations may cause a malfunction of the active hood lift system.**

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# ACCESSING YOUR VEHICLE

## Smart Key

■ Type A

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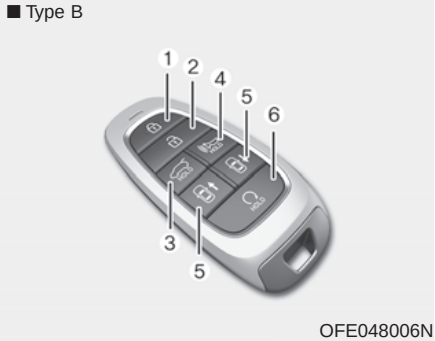
■ Type B




OFE048006N

Your HYUNDAI uses a Smart Key, which you can use to lock or unlock the driver and passenger doors or the rear liftgate.

1. Door Lock
2. Door Unlock
3. Liftgate Unlock (Manual liftgate) Liftgate Open/Close (Power liftgate)
4. Panic
5. Remote start
6. Remote Smart Parking Assist (Forward/Backward)

### *Locking your vehicle*

OFE048003

To lock your vehicle using the door handle button or the Smart Key:

1. Make sure all doors, the hood and the liftgate are closed.
2. Make sure you have the smart key in your possession.
3. Press either the button on the door handle or the Door Lock button (1) on the smart key. The chime will sound once and the hazard warning lights will blink.
4. Make sure the doors are locked by checking the position of the door lock button inside the vehicle.

## Information

**The door handle button will only operate when the smart key is within 28~40 inches (0.7~1 m) from the outside door handle.**

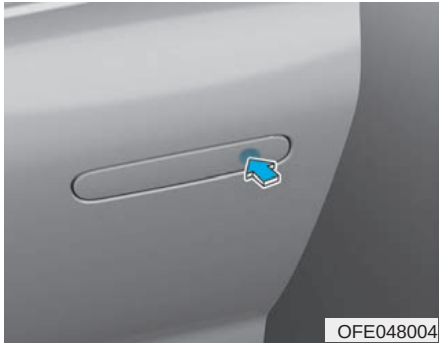
Note that you cannot lock your vehicle using the door handle button if any of the following occur:

- The Smart Key is in the vehicle.
- The POWER button is in ACC or ON position.
- Any of the doors are open except for the liftgate.

**WARNING**

**Do not leave the Smart Key in your vehicle with unsupervised children. Unattended children could press the POWER button and may operate power windows or other controls, or even make the vehicle move, which could result in serious injury or death.**

### *Unlocking your vehicle*




To unlock your vehicle:

1. Make sure you have the smart key in your possession.
2. Press either the button on the door handle or the Door Unock button (2) on the smart key. The driver's door will unlock and the hazard warning lights will blink two times.

Two Press Unlock Feature

The priority for unlocking the driver door only, or unlocking all the doors with one press may be adjusted in the User Settings mode in the Infotainment system LCD display.

The Two Press Unlock feature, when enabled, will require the user to press the door unlock button once for driver door only and twice for unlocking all the doors within 4 seconds.

Select or Deselect the Two Press Unlock feature in the User Settings mode in the Infotainment system LCD display. The option can be found under the following menu:

Vehicle Settings mode → Door/Liftgate → Two Press Unlock

The Two Press Unlock feature can also be enabled or disabled by pressing the door lock and unlock buttons simultaneously on the Key FOB:

Press and hold both the Door Lock button and the Door Unlock button simultaneously until the hazard warning lights blink.

This will enable or disable the Two Press Unlock feature. Repeat this procedure to enable/disable the mode again.

### Information

- **The door handle buttons will only operate when the smart key is within 28-40 inches (0.7~1m) from the outside door handle**
- **Either the driver or front passenger door can be opened with the door handle button when the smart key is within this range**
- **If you press the front passenger outside door handle with the smart key in your possession, all the doors will unlock**

## *Opening the liftgate*

### Non-power liftgate

To unlock and open the liftgate:

1. Make sure you have the smart key in your possession.
2. Press either the liftgate handle release switch on the vehicle or press and hold the Liftgate Unlock button on the smart key for more than one second. The hazard warning lights will blink two times and the liftgate latch will unlock.
3. Once the liftgate is opened and then closed, the liftgate will automatically re-lock after 30 seconds.

### Information

- **The liftgate handle switch will only operate when the smart key is within 28 inches (0.7 m) from the liftgate handle.**
- **The Liftgate Unlock button (3) will only unlock the liftgate. It will not release the latch and open the liftgate automatically. If the Liftgate Unlock button is used, someone must still press the liftgate handle switch to open the liftgate.**

### Power liftgate

To unlock and open the liftgate:

1. Make sure you have the smart key in your possession.
2. Press either the liftgate handle release switch on the vehicle or press and hold the Liftgate Unlock button on the smart key for more than one second. The hazard warning lights will blink two times and the liftgate latch will open.
3. Once the liftgate is opened and then closed, the liftgate will automatically re-lock after 30 seconds.

### Information

**The liftgate handle switch will only operate when the smart key is within 28 inches (0.7 m) from the liftgate handle.**

### *Panic button*

Press and hold the Panic button (4) for more than one second. The horn sounds and hazard warning lights blink for about 30 seconds. To cancel the panic mode, press any button on the Smart Key.

### *Start-up*

You can start the vehicle without inserting the key.

**For information, refer to the "POWER button" section in chapter 5.**

**NOTICE**

**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 which may not be covered under warranty.**
- **Avoid dropping or throwing the smart key.**
- **Protect the smart key from extreme temperatures.**

### *Remote start (if equipped)*

You can start the vehicle using the remote start button (6) of the smart key.

To start the vehicle remotely :

- Lock the doors by pressing the door lock button (1) within 32 ft (10 m) distance from the vehicle.
- Press the remote start button for over 2 seconds within 4 seconds after locking the doors.

Press the remote start button once to turn off the vehicle.

Air conditioner/heater system maintains the status before turning off the vehicle.

If no further action for operating/driving the vehicle is taken, the vehicle will be turned off 10 minutes after starting the vehicle remotely.

**⚠ CAUTION**

- **Laws in your country may restrict the use of remote start. You should check country regulations before using this remote starting system.**
- **It is only possible to start the vehicle remotely when shifted to P (Park).**
- **If the hood or the liftgate is opened, you cannot start the vehicle remotely.**
- **The Remote start function works the same as Blue Link remote start. For further caution information, refer to the separately supplied "Blue Link (Infotainment system) manual".**

### *Remote Smart Parking Assist (RSPA) (if equipped)*

Remote Smart Parking Assist helps the drivers park their vehicle by using sensors to measure parking spaces and control the steering wheel, gear shift and vehicle speed to semi-automatically park the vehicle and provide instruction on the Infotainment system screen to help through parking.

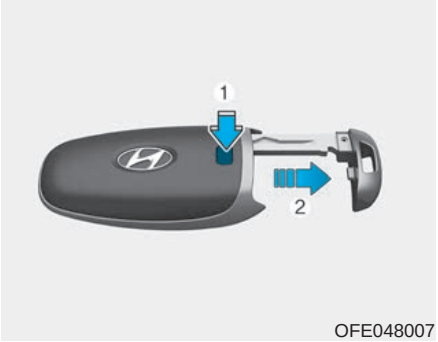
The driver can activate Remote Smart Parking Assist after measuring the parking spaces or using the smart key.

It is also possible to move the vehicle forward or backward using the buttons (5) on the smart key.

For more details, refer to "Remote Smart Parking Assist (RSPA)" in this chapter.

### *Mechanical key*

If the Smart Key does not operate normally, you can lock or unlock the driver's door by using the mechanical key.



OFE048007

To remove the mechanical key from the smart key FOB, slide the release lever in the direction of the arrow (1) and then pull the mechanical key (2) outward.

To unlock the vehicle using the mechanical key. insert the mechanical key into the key hole in the driver door (Refer to "DOOR LOCKS" in this chapter.)

To reinstall the mechanical key into the FOB, insert the key in the top of the key FOB and push inward until a click sound is heard.

### *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, you should immediately take the vehicle and remaining keys 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 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 cellular phone.
- Another vehicle's smart key is being operated close to your vehicle.
- If your windows are tinted, especially with metallic window tint, it may cause frequency interference, reducing the smart key operating range.

If the smart key does not work correctly, open and close the door with the mechanical key. If you have a problem with the smart key, contact an authorized HYUNDAI dealer.

If the smart key is in close proximity to your mobile phone, the signal could be blocked by your mobile phone's normal operational signals. This is specifically relevant when the phone is active such as making and receiving calls, text messaging, and/or sending/receiving emails. When possible, avoid keeping the remote key and your mobile phone in the same location such as a pants or jacket pocket in order to avoid interference between the two devices.

**NOTICE**

**Keep the smart key away from electromagnetic materials that blocks electromagnetic waves to the key surface.**

**NOTICE**

**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.**

### *i* Information

**This device complies with Part 15 of the FCC rules.**

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

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

### *Battery replacement*

OFE048009

OFE048008

If the Smart Key is not working properly, try replacing the battery with a new one.

Battery Type: CR2032

To replace the battery:

1. Remove the mechanical key.
2. Use a slim tool to pry open the rear cover of the smart key.
3. Remove the old battery and insert the new battery. Make sure the battery position is correct.
4. 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.**

**Information**

**An inappropriately disposed battery can be harmful to the environment and human health. Dispose of the battery according to your local law(s) or regulations.**

## Immobilizer System

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

When the POWER button is placed in the ON position, the immobilizer system indicator should come on briefly, then go off. If the indicator starts to blink, the system does not recognize the coding of the key.

Place the POWER button to the OFF position, then place the POWER button to the ON position again.

In some circumstances, the vehicle may not recognize your smart key if another smart key device is nearby or a metal object such as a key chain is causing interference with the smart key.

If this occurs, your vehicle may not start. Remove any metal objects or additional keys near the smart key before attempting to start the vehicle again.

If the system repeatedly does not recognize the coding of the key, it is recommended that you contact your HYUNDAI dealer.

Do not attempt to alter this system or add other devices to it. Electrical problems could result that may make your vehicle inoperable.

**⚠ WARNING**

**In order 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***

**The transponder in your key is an important part of the immobilizer system. It is designed to give years of trouble-free service, however you should avoid exposure to moisture, static electricity and rough handling. Immobilizer system malfunction could occur.**

### *i* Information

**This device complies with Part 15 of the FCC rules.**

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

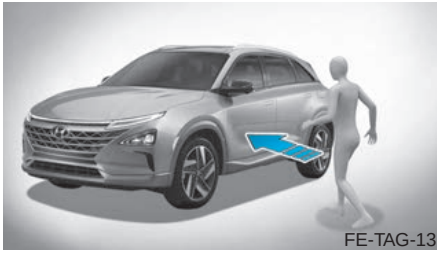
1. **This device may not cause harmful interference.**
2. **This device must accept any interference received, including interference that may cause undesired operation.**
3. **Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate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

# DOOR LOCKS

## Door unlocking from outside the vehicle

### *Smart key*

OFE048002


FE-TAG-13

FE-TAG-10

#### Approach unlock system

The outside door handle will slide out and the doors will unlock when the driver approaches the vehicle possessing the smart key.

The driver can activate/deactivate the "Approach unlock" system on the Infotainment system screen.

Go to "Vehicle settings → Door/Tailgate → Approach unlock".

- When the "Approach unlock" is activated :
  - If you approach (within 40 in.(1 m)) the driver or front passenger's door handle possessing the smart key, the outside door handles slide out and the doors are unlocked. In this case, Hazard Warning Flasher blinks twice and chime also sounds twice.
  - After first approach, the vehicle tries detecting the smart key every 5 seconds and if the key is not detected, the doors will lock automatically and the handles will slide in.
- When the "Approach unlock" is deactivated :
  - The handle does not slide out even when you approach with the smart key in possession. The doors are unlocked if you press the outside handle as the handles slide out.
- The doors will lock automatically and the handles will slide in after 30 seconds unless a door is opened.
- Unlock the door and pull the outside handle to open the door.
- Push the door to close.

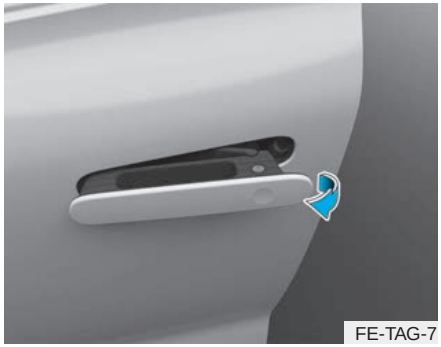
**NOTICE**

- **If the door is locked/unlocked multiple times in rapid succession with the smart key, door lock button or door lock switch, the system may stop operating temporarily in order to protect the circuit. Also, the "Approach unlock" system may not operate. Try operation after a sufficient time in case the system does not operate due to multiple operations.**
- **"Approach unlock" system is not operated continuously. Retry after a certain period of time when all the doors are closed.**

### *Mechanical key*

FE-TAG-8

1. Push the front side of the door handle.


FE-TAG-7

2. Pull the rear side of the handle while holding it.

FE-TAG-3

3. Open the plug by using the mechanical key.

FE-TAG-6

4. Put the key in and turn it clockwise.

FE-TAG-4

5. Pull the handle.

**NOTICE**

**Excessive force applied on the door and door handle may result in damage.**

**⚠ WARNING**

- **Close the door tightly or door may reopen.**
- **Make sure the fingers or other body parts are not caught between the doors when opening/closing the doors.**
- **Make sure the fingers or other body parts are caught inside the handle while the handle is pulled. The door may not fully close if the handle is back to its normal position due to any foreign material.**

## Door locking from outside the vehicle

### *Smart key*

FE-TAG-11

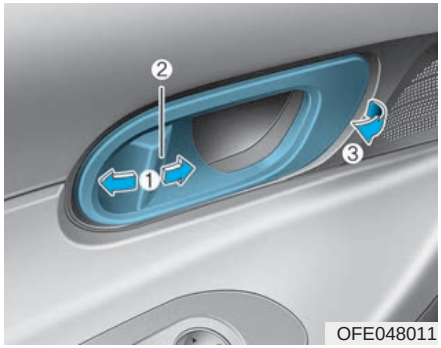
FE-TAG-9/OFE048436L

FE-TAG-12

- To lock the doors, press the button on the outside door handle while carrying the smart key with you. The handle will slide in as it's locked. In this case, Hazard Warning Flasher blinks and chime also sounds once.

## Operating Door Locks from Inside the Vehicle

### *With the door lock button*



OFE048011

- To unlock a door, push the door lock button (1) to the "Unlock" position. The red mark (2) on the door lock button will be visible.
- To lock a door, push the door lock button (1) to the "Lock" position. If the door is locked properly, the red mark (2) on the door lock button will not be visible.
- To open a door, pull the door handle (3) outward.

- If the inner door handle of either the driver door or passenger door is pulled when the door lock button is in the lock position, the button is unlocked and the door will open.
- The doors cannot be locked if the smart key is inside the vehicle and any of the doors are open.

### Information

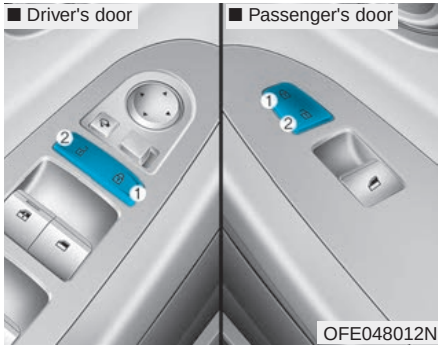
**If a power door lock ever fails to function while you are in the vehicle try one or more of the following techniques to exit:**

- **Operate the door unlock feature repeatedly (both electronic and manual) while simultaneously pulling on the door handle.**
- **Operate the other door locks and handles, front and rear.**

### Information

**When the vehicle's battery run out and you leave the vehicle, make sure all the doors are locked. You can lock the driver's door with a key and the rest of the doors with the lock button above the door inside handle.**

### *With the central door lock switch*




The driver side and front passenger side door armrest is equipped with a central door lock switch. The lock button is indicated by a (🔒) symbol. The unlock button is indicated by a (🔓) symbol.

When the lock button (1) is pressed, all the vehicle doors will lock.

When the unlock button (2) is pressed, all the vehicle doors will unlock.

If the smart key is in the vehicle and any door is open, the doors will not lock even though the lock button (1) is pressed.

**⚠ WARNING**

- **The doors should always be fully closed and locked while the vehicle is in motion. If the doors are unlocked, the risk of being thrown from the vehicle in a crash is increased.**
- **Do not pull the inner door handle of the driver's or passenger's door while the vehicle is moving.**

**⚠ WARNING**

**Do not leave the elderly, children or animals unattended in your vehicle. An enclosed vehicle can become extremely hot, causing death or serious injury to the elderly, unattended children or animals who cannot escape from the vehicle. Children might operate features of the vehicle that could injure them, or they could encounter other harm, possibly from someone gaining entry to the vehicle.**

**⚠ WARNING**

**Always secure your vehicle.**

**Leaving your vehicle unlocked increases the potential risk to you or others from someone hiding in your vehicle.**

**To secure your vehicle, while depressing the brake, move the shift lever to the P (Park) position, engage the parking brake, and place the POWER button in the LOCK/OFF position, close all windows, lock all doors, and always take the key with you.**

**⚠ CAUTION**

**Opening a door when something is approaching may cause damage or injury. Be careful when opening doors and watch for vehicles, motorcycles, bicycles or pedestrians approaching the vehicle in the path of the door.**

**⚠ WARNING**

**If you stay in the vehicle for a long time while the weather is very hot or cold, there are risks of injuries or danger to life. Do not lock the vehicle from the outside when someone is in the vehicle.**

## Automatic Door Lock and Unlock Features

Your vehicle is equipped with features that will automatically lock or unlock your vehicle based on settings you select in the Infotainment system LCD display.

### *Auto LOCK - Enable on Speed*

When this feature is set in the Infotainment system LCD display, all the doors will be locked automatically when the vehicle exceeds 9 mph (15 kph).

### *Auto LOCK - Enable on Shift*

When this feature is set in the Infotainment system LCD display, all the doors will be locked automatically when the vehicle is shifted out of P (Park) while the vehicle is ON.

### *Auto UNLOCK - On shift to P*

When this feature is set in the Infotainment system LCD display, all the doors will be unlocked automatically when the vehicle is shifted back into P (Park).

**For more information on these features, refer to the LCD Display section later in this chapter.**

### *Auto UNLOCK – On vehicle Off*

When this feature is set in the Infotainment system LCD display, all the doors will be unlocked automatically when the vehicle is off.

### *Additional Unlock Safety Feature - Air Bag Deployment*

As an additional safety feature, all doors will be automatically unlocked when an impact causes the air bags to deploy.

## Child-Protector Rear Door Locks

OFE048013N

The child safety lock is provided to help prevent children seated in the rear from accidentally opening the rear doors. The rear door safety locks should be used whenever children are in the vehicle.

The child safety lock is located on the edge of each rear door. When the child safety lock is in the lock position, the rear door will not open if the inner door handle is pulled.

To lock the child safety lock, insert a small flat blade tool (like a screwdriver or similar) (1) into the slot and turn it to the lock position as shown.

To allow a rear door to be opened from inside the vehicle, unlock the child safety lock.

**⚠ WARNING**

**If children accidently open the rear doors while the vehicle is in motion, they could fall out of the vehicle. The rear door safety locks should always be used whenever children are in the vehicle.**

## THEFT-ALARM SYSTEM

This system helps to protect your vehicle and valuables. The horn will sound and the hazard warning lights will blink continuously if any of the following occurs:

- 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 with the smart key or by pressing the button on the outside of the door handles with the smart key in your possession.

The hazard warning lights will blink and the chime will sound once to indicate the system is armed.

Once the security system is set, opening any door, the liftgate, or the hood without using the smart key will cause the alarm to activate.

The Theft Alarm System will not set if the hood, the liftgate, or any door is not fully closed. If the system will not set, check the hood, the liftgate, or the doors are fully closed.

Do not attempt to alter this system or add other devices to it.

### Information

- **Do not lock the doors until all passengers have left the vehicle. If the remaining passenger leaves the vehicle when the system is armed, the alarm will be activated.**
- **If the vehicle is not disarmed with the smart key, open the doors by using the mechanical key and start the vehicle ( indicator ON) by directly pressing the POWER button with the smart key.**
- **When the system is disarmed but a door or liftgate is not opened within 30 seconds, the system will be rearmed.**

# STEERING WHEEL

## Motor Driven Power Steering (MDPS)

The system assists you with steering the vehicle. If the vehicle is turned off or if the power steering system becomes inoperative, you may still steer the vehicle, but it will require increased steering effort.

Should you notice any change in the effort required to steer during normal vehicle operation, have the system checked by an authorized HYUNDAI dealer.

**⚠ CAUTION**

**If the Motor Driven Power Steering System does not operate normally, the warning light (⊘!) will illuminate on the instrument cluster. You may steer the vehicle, but it will require increased steering efforts. Take your vehicle to an authorized HYUNDAI dealer and have the system checked as soon as possible.**

### *i* Information

**The following symptoms may occur during normal vehicle operation:**

- **The steering effort may be high immediately after placing the POWER button in the ON position.**

  **This happens as the system performs the MDPS system diagnostics. When the diagnostics is completed, the steering wheel will return to its normal condition.**
- **When the battery voltage is low, you might have to put more steering effort. However, it is a temporary condition so that it will return to normal condition after charging the battery.**
- **A click noise may be heard from the MDPS relay after the POWER button is in the ON or OFF position.**
- **Motor noise may be heard when the vehicle is at a stop or at a low driving speed.**
- **When you operate the steering wheel in low temperature, abnormal noise may occur. If temperature rises, the noise will disappear. This is a normal condition.**
- **When an error is detected from the MDPS, the assistant function of steering effort will not be activated in order to prevent fatal accidents. Instrument cluster warning lights may be on or the steering effort may be high. When the following symptoms occur, immediately drive the vehicle to a safe area and check it.**

## Tilt Steering / Telescope Steering

Adjust the steering wheel so it points 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 both up and down to be certain it is locked in position. Always adjust the position of the steering wheel before driving.

**⚠ WARNING**

**NEVER adjust the steering wheel while driving. This may cause loss of vehicle control resulting in an accident.**

OFE048014

To change the steering wheel angle and height:

1. Pull down the lock-release lever (1).
2. Adjust the steering wheel to the desired angle (2) and height (3).
3. Pull up the lock-release lever to lock the steering wheel in place.

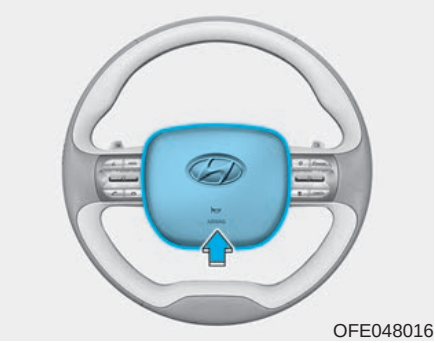
**Information**

**After adjustment, sometimes the lock release lever may not lock the steering wheel. It is not a malfunction. This occurs when two gears are not engaged correctly. In this case, adjust the steering wheel again and then lock the steering wheel.**

**⚠ CAUTION**

**While adjusting the steering wheel height, please do not push or pull it hard since the fixture can be damaged.**

## Horn

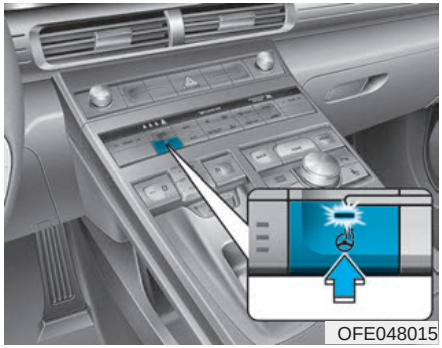

OFE048016

To sound the horn, press the area indicated by the horn symbol on your steering wheel (see illustration). The horn will operate only when this area is pressed.

**NOTICE**

**Do not strike the horn severely to operate it, or hit it with your fist. Do not press on the horn with a sharp-pointed object.**

## Heated Steering Wheel (if equipped)


OFE048015

When the POWER button is in the ON position or when the vehicle is in the ready ( ) mode, press the heated steering wheel button to warm the steering wheel. The indicator on the button will illuminate.

To turn the heated steering wheel off, press the button again. The indicator on the button will turn off.

The heated steering wheel will automatically turn off after approximately 30 minutes.

**NOTICE**

**Do not install any cover or accessory on the steering wheel. The cover or accessory could cause damage to the heated steering wheel system.**

# 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 in the rear seat, cargo area, or behind the rear head restraints which could interfere with your vision through the rear window.**

**⚠ WARNING**

**To prevent serious injury during an accident or deployment of the air bag, do not modify the rearview mirror and do not install a wide mirror.**

**⚠ WARNING**

**NEVER adjust the mirror while driving. This may cause loss of vehicle control resulting in an accident.**

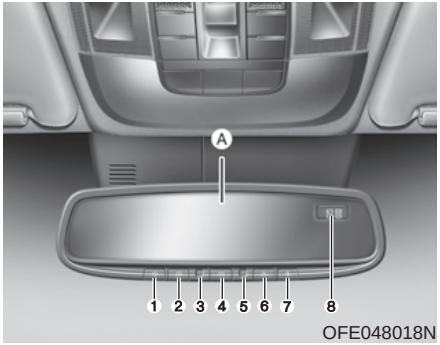
***NOTICE***

**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.**

### *Electric chromic mirror (ECM) with compass and HomeLink® system*

Your vehicle may be equipped with a Gentex Automatic-Dimming Mirror with a Z-Nav™ Electronic Compass Display and an Integrated HomeLink® Wireless Control System.

During nighttime driving, this feature will automatically detect and reduce rearview mirror glare while the compass indicates the direction the vehicle is pointed. The HomeLink® Universal Transceiver allows you to activate your garage door(s), electric gate, home lighting, etc.



OFE048018N

(1) Channel 1 button
(2) Channel 2 button
(3) Status indicator LED
(4) Channel 3 button
(5) Rear light sensor
(6) Dimming ON/OFF button
(7) Compass control button
(8) Compass display

### 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.

**For more information regarding NVS® mirrors and other applications, please refer to the Gentex website:**

**www.gentex.com**

The auto-dimming function can be controlled by pressing the ON/OFF button:

1. Pressing the button turns the auto-dimming function OFF which is indicated by the green Status Indicator LED turning off.
2. Pressing the button again turns the auto-dimming function ON which is indicated by the green Status Indicator LED turning on.

The mirror defaults to the ON position each time the vehicle is started.

### Z-Nav™ Compass Display

The NVS™ Mirror in your vehicle is also equipped with a Z-Nav™ Compass that shows the vehicle Compass heading in the Display Window using the 8 basic cardinal headings (N, NE, E, SE, etc.).

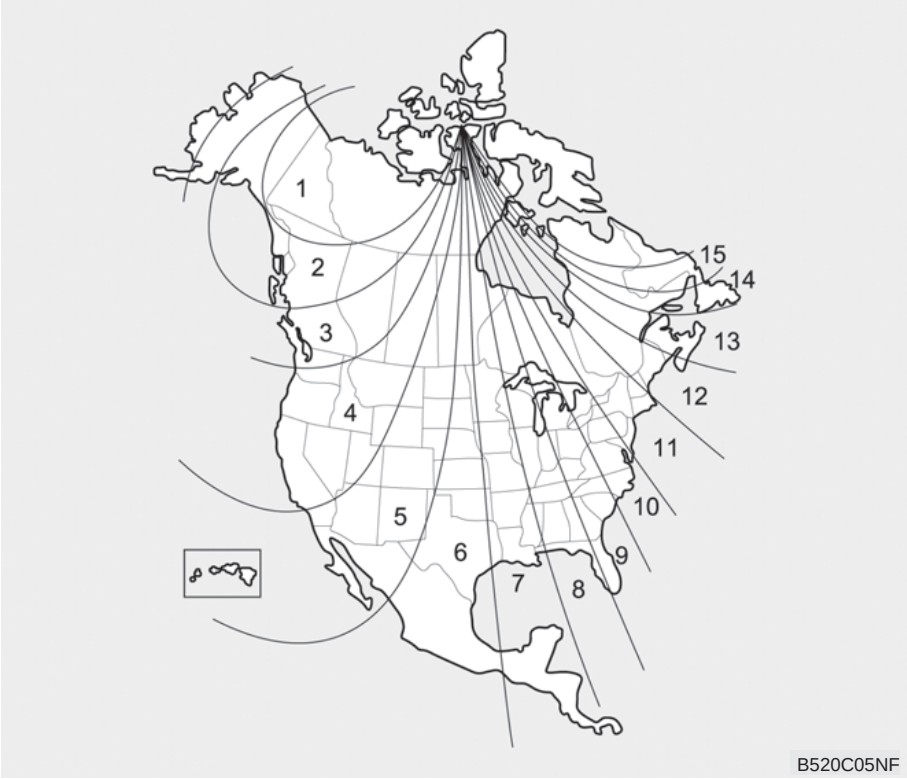
*Compass function*

The Compass can be turned ON and OFF and will remember the last state when the ignition is cycled. To turn the display feature ON/OFF:

1. Press and release the ⏻ button to turn the display feature OFF.
2. Press and release the ⏻ button again to turn the display back ON.

Additional options can be set with press and hold sequences of the button and are detailed below.

There is a difference between magnetic north and true north. To compensate for this difference you will need to adjust the Zone setting based on where you live.



To adjust the Zone setting:

1. Determine the desired Zone Number based upon your current location on the Zone Map.
2. Press and hold the ⏻ button for more than 3 but less than 6 seconds, the current Zone Number will appear on the display.
3. Pressing and holding the ⏻ button again will cause the numbers to increment (Note: they will repeat …13, 14, 15, 1, 2, …). Releasing the button when the desired Zone Number appears on the display will set the new Zone.
4. Within about 5 seconds the compass will start displaying a compass heading again.

There are some conditions that can cause changes to the vehicle magnets, such as installing a ski rack or a CB antenna. Body repair work on the vehicle can also cause changes to the vehicle's magnetic field. In these situations, the compass will need to be re-calibrated to quickly correct these changes.

If you need to recalibrate the compass:

1. Press and hold the ⏻ button for more than 6 seconds. When the compass memory is cleared a "C" will appear in the display.
2. Drive the vehicle in 2 complete circles at less than 5 mph (8 km/h).

### Integrated HomeLink® Wireless Control System

The HomeLink® Wireless Control System can replace up to three hand-held radio-frequency (RF) transmitters with a single built-in device. This innovative feature will learn the radio frequency codes of most current transmitters to operate devices such as gate operators, garage door openers, entry door locks, security systems, even home lighting. Both standard and rolling code-equipped transmitters can be programmed by following the outlined procedures.

Additional HomeLink® information can be found at: www.homelink.com or by calling 1-800-355-3515.

Retain the original transmitter of the RF device you are programming for use in other vehicles as well as for future HomeLink® programming. It is also suggested that upon the sale of the vehicle, the programmed HomeLink® buttons be erased for security purposes.

**⚠ 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.**

### Programming HomeLink®

Please note the following:

- When programming a garage door opener, it is advised to park the vehicle outside of the garage.
- 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.
- Some vehicles may require the POWER button to be placed in the ACC (or "Accessories") position for programming and/or operation of HomeLink®.
- In the event that there are still programming difficulties or questions after following the programming steps listed below, contact HomeLink® at: www.homelink.com or by calling 1-800-355-3515.

*Rolling code programming*

Rolling code devices which are "code-protected" and manufactured after 1996 may be determined by the following:

- Reference the device owner's manual for verification.
- The handheld transmitter appears to program the HomeLink® Universal Transceiver but does not activate the device.
- Press and hold the trained HomeLink button. The device has the rolling code feature if the indicator light flashes rapidly and then turns solid after 2 seconds.

To train rolling code devices, follow these instructions:

1. At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit. Exact location and color of the button may vary by garage door opener brand. If there is difficulty locating the training button, reference the device owner's manual or please visit our Web site at www.homelink.com.
2. Firmly press and release the "learn" or "smart" button (which activates the "training light"). You will have 30 seconds to initiate step 3.
3. Return to the vehicle and firmly press, hold for two seconds and then release the desired HomeLink® button. Repeat the "press/hold/release" sequence a second time to complete the programming. (Some devices may require you to repeat this sequence a third time to complete the programming.)
4. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate.
5. To program the remaining two HomeLink® buttons, follow either steps 1 through 4 above for other Rolling Code devices or steps 2 through 5 in Standard Programming for standard devices.

*Standard programming*

To train most devices, follow these instructions:

1. For first-time programming, press and hold the two outside buttons, HomeLink® Channel 1 and Channel 3 Buttons, until the indicator light begins to flash (after 20 seconds). Release both buttons. Do not hold the buttons for longer than 30 seconds.
2. Position the end of your hand-held transmitter 1-3 inches (2-8 cm) away from the HomeLink® buttons while keeping the indicator light in view.
3. Simultaneously press and hold both the HomeLink® and hand-held transmitter button. DO NOT release the buttons until step 4 has been completed.
4. While continuing to hold the buttons the red Indicator Status LED will flash slowly and then rapidly after HomeLink® successfully trains to the frequency signal from the hand-held transmitter. Release both buttons.

5. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your device should activate when the HomeLink® button is pressed and released.
6. To program the remaining two HomeLink® buttons, follow steps 2 through 5.

*Gate operator & Canadian programming*

During programming, your handheld transmitter may automatically stop transmitting. Continue to press the Integrated HomeLink® Wireless Control System button (note steps 2 through 4 in the Standard Programming portion of this document) while you press and re-press ("cycle") your handheld transmitter every two seconds until the frequency signal has been learned. The indicator light will flash slowly and then rapidly after several seconds upon successful training.

*Operating HomeLink®*

To operate, simply press and release the programmed HomeLink® button. Activation will now occur for the trained device (for example, garage door opener, gate operator, security system, entry door lock, home/office lighting, etc.). For convenience, the hand-held transmitter of the device may also be used at any time.

*Reprogramming a single HomeLink® button*

To program a new device to a previously trained HomeLink® button, follow these steps:

1. Press and hold the desired HomeLink® button. Do NOT release until step 4 has been completed.
2. When the indicator light begins to flash slowly (after 20 seconds), position the handheld transmitter 1 to 3 inches away from the HomeLink® surface.
3. Press and hold the handheld transmitter button. The HomeLink® indicator light will flash, first slowly and then rapidly.
4. When the indicator light begins to flash rapidly, release both buttons.
5. Press and hold the just-trained HomeLink® button and observe the red Status Indicator LED. If the indicator light stays on constantly, programming is complete and your new device should activate.

*Erasing HomeLink® buttons*

Individual buttons cannot be erased. However, to erase all three programmed buttons:

1. Press and hold the two outer HomeLink® buttons until the indicator light begins to flash-after 20 seconds.
2. Release both buttons. Do not hold for longer than 30 seconds.

The Integrated HomeLink® Wireless Control System is now in the training (learn) mode and can be programmed at any time following the appropriate steps in the Programming chapters above.

NVS® is a registered trademark and Z-Nav™ is a trademark of the Gentex Corporation, Zeeland, Michigan. HomeLink® is a registered trademark owned by Johnson Controls, Incorporated, Milwaukee, Wisconsin.

**FCC ID : NZLHFCHL4**

**IC : 4112A-HFCHL4**

## Information

**This device complies with Part 15 of the FCC Rules.**

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

1. **This device may not cause harmful interference, and**
2. **This device must accept any interference received, including interference that may cause undesired operation.**
3. **The transceiver has been tested and complies with FCC and Industry Canada rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.**

## Side View Mirrors

OFE048019

Make sure to adjust the side view mirrors to your desired position before you begin driving.

Your vehicle is equipped with both left-hand and right-hand side view mirrors. The mirrors can be adjusted remotely with the remote switch. The side view mirrors can be folded to help prevent damage when going through an automatic car wash or when passing through a narrow street.

The right side view mirror is convex. Objects seen in the mirror are closer than they appear.

Use the inside side view mirror or look back directly to determine the actual distance of other vehicles prior to changing lanes.

**⚠ WARNING**

**Do not adjust or fold the side view mirrors while driving. This may cause loss of vehicle control resulting in an accident.**

**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.**

**NOTICE**

**Do not clean the mirror with harsh abrasives, fuel or other petroleum based cleaning products.**

### *Side view mirror adjustment*

OFE048430L

Adjusting the side view mirrors:

1. Press either the L (driver's side) or R (passenger's side) button (1) to select the side view mirror you would like to adjust.
2. Use the mirror adjustment control switch (2) to position the selected mirror up, down, left or right.

**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 attempt to adjust the side view mirrors by hand, because this can damage the motor.**

### *Folding the side view mirror*

OFE048021

The side view mirror can be folded or unfolded by pressing the switch.

- If 'Convenience → Welcome mirror/light → On door unlock' is selected in the vehicle Settings mode on the Infotainment system screen, the side view mirror will fold or unfold automatically as follows:
  - The mirror will fold or unfold when the door is locked or unlocked by the smart key.
  - The mirror will fold or unfold when the door is locked or unlocked by the button on the outside door handle.
- If 'Convenience → Welcome mirror/light → On door unlock' and 'Convenience → Welcome mirror/light → On driver approach' is selected in the vehicle Settings mode on the Infotainment system screen, the side view mirror will unfold automatically when you approach the vehicle (all doors closed and locked) with a smart key in possession.

**NOTICE**

**The electric type side view mirror operates even though the POWER button is in the OFF position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the vehicle is not in the ready ( ) mode.**

**NOTICE**

**Do not fold the electric type side view mirror by hand. It could cause motor failure.**

### *Remote window opening function (if equipped)*

■ Type A

OFE048005

■ Type B

OFE048006N

Press and hold the Door Unlock 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 button.

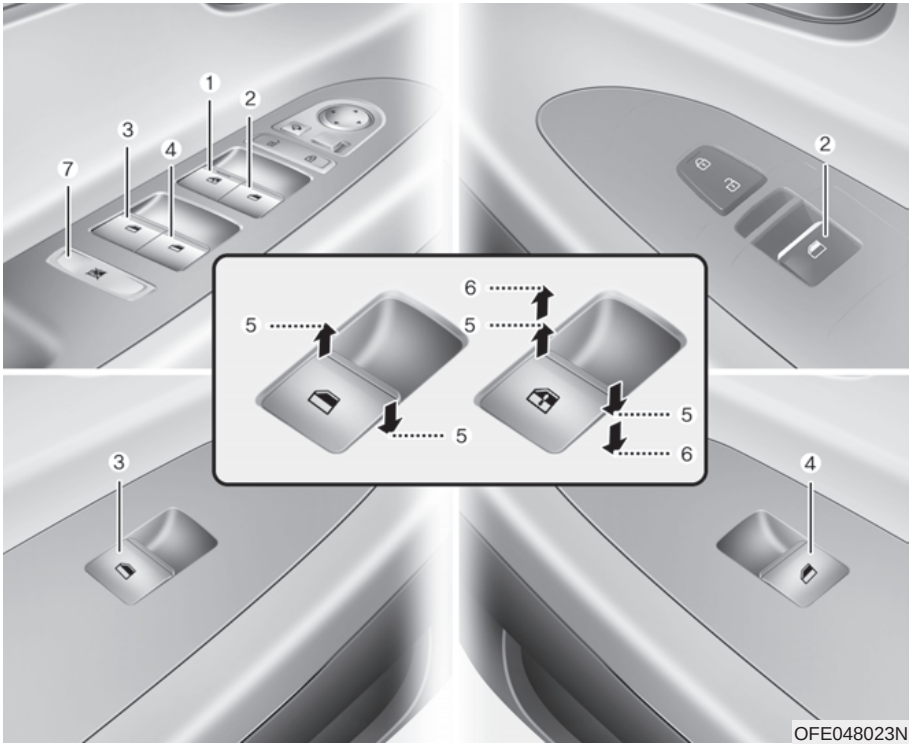
**⚠ WARNING**

**If you stay on the function after operating the Remote window opening function, it is likely to cause a theft. In addition, please use caution there might be a malfunction due to the inflow of water while raining.**

### *i* Information

- **The remote window opening function may abruptly stop, when you move away from your vehicle during operation. Stay in close proximity from your vehicle, while monitoring the window movement.**
- **One of the windows may stop operating, when the window is interrupted by certain force. However, the other windows will keep operating. Thus, you should make sure that all windows are closed.**
- **The remote window opening function is operated on the window equipped with an automatic power window.**
- **Please be aware that the doors unlock when the windows are opened using the remote window open function.**

## WINDOWS




(1) Driver's door power window switch
(2) Front passenger's door power window switch
(3) Rear door (left) power window switch
(4) Rear door (right) power window switch
(5) Window opening and closing
(6) Automatic power window (if equipped)
(7) Power window lock switch




3-35

## Power Windows

The POWER button must be in the ON position to be able to raise or lower the windows. Each door has a Power Window switch to control that door's window. The driver has a Power Window Lock switch which can block the operation of rear passenger windows. The power windows will operate for approximately 10 minutes after the POWER button is placed in the ACC or OFF position. However, if the front doors are opened, the Power Windows will not operate even within the 10 minutes period.

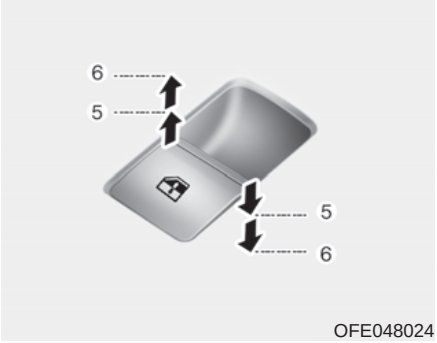
**⚠ WARNING**

**To avoid serious injury or death, do not extend your head, arms or body outside the windows while driving.**

### Information

- **In cold and wet climates, power windows may not work properly due to freezing conditions.**
- **While driving with the rear windows down or with the sunroof (if equipped) opened (or partially opened), your vehicle may demonstrate a wind buffeting or pulsation noise. This noise is normal and can be reduced or eliminated by taking the following actions. If the noise occurs with one or both of the rear windows down, partially lower both front windows approximately one inch. If you experience the noise with the sunroof open, slightly close the sunroof.**

### *Window opening and closing*



OFE048024

To open:

Press the window switch down to the first detent position (5). Release the switch when you want the window to stop.

To close:

Pull the window switch up to the first detent position (5). Release the window switch when you want the window to stop.

### *Auto up/down window (if equipped)*

Pressing or pulling up the power window switch momentarily to the second detent position (6) completely lowers or lifts the window even when the switch is released. To stop the window at the desired position while the window is in operation, pull up or press down and release the switch.

### *To reset the power windows*

If the power windows do not operate normally, the automatic power window system must be reset as follows:

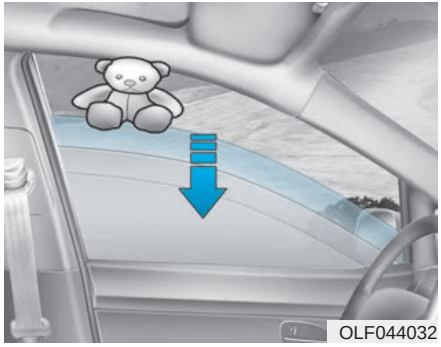
1. Place the POWER button to the ON position.
2. Close the window and continue pulling up on the power window switch for at least one second.

If the power windows do not operate properly after resetting, have the system checked by an authorized HYUNDAI dealer.

**⚠ WARNING**

**The automatic reverse feature doesn't activate while resetting the power window system. Make sure body parts or other objects are safely out of the way before closing the windows to avoid injuries or vehicle damage.**

### *Automatic reverse (if equipped)*




If a window senses any obstacle while it is closing automatically, it will stop and lower approximately 12 inches (30 cm) to allow the object to be cleared.

If the window detects the resistance while the power window switch is pulled up continuously, the window will stop upward movement then lower approximately 1 inch (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 will not operate.

## Information

**The automatic reverse feature is only active when the "Auto Up" feature is used by fully pulling up the switch to the second detent.**

**WARNING**

**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 inch (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 will not stop and reverse direction.**

**NOTICE**

**Do not install any accessories on the windows. The automatic reverse feature may not operate.**

### *Power window lock switch*

OFE048025

The driver can disable the power window switches on the rear passenger doors by pressing the power window lock switch.

When the power window lock switch is pressed:

- The rear passenger control will not be able to operate the rear passenger power window
- Note that the front passenger control is still able to operate the front passenger window, and that the driver master control can still operate all the power windows.

**WARNING**

**Do not allow children to play with the power windows. Keep the driver's door power window lock switch in the LOCK position. Serious injury or death can 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 will also ensure 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 will stop and cannot be opened or closed.**

## WIDE SUNROOF (IF EQUIPPED)

If your vehicle is equipped with a sunroof, you can slide or tilt your sunroof with the sunroof switch located on the overhead console.

OFE048026N

The sunroof can only be operated when the Start/Stop button is in the ON or START position.

The sunroof can be operated for about 10 minutes after the Start/Stop button is in the ACC or OFF position. However, if the front door is open, the sunroof cannot be operated even within the 10 minute period.

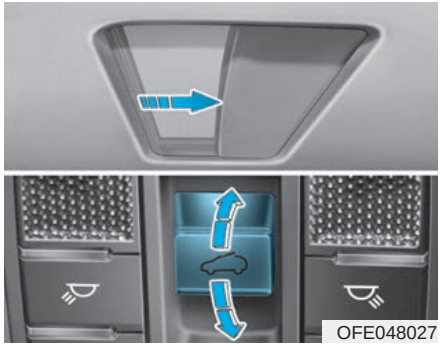
**⚠ WARNING**

- **Adjust the sunroof or sunshade when your vehicle stops. This could result in loss of control and an accident that may cause injury, or property damage.**
- **Do not leave the vehicle running and the key in your vehicle with unsupervised children. Unattended children could operate the sunroof, which could result in serious injury.**
- **Do not sit on the top of the vehicle. It may cause injury or vehicle damage.**

***NOTICE***

**Do not operate the sunroof when roof bars are installed on the vehicle or when there is luggage on the roof.**

### Power sunshade


OFE048027

Use the 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. However, if the sunroof glass is open, the glass will close first.

To stop the power sunshade at any point, push the sunroof switch in any direction.

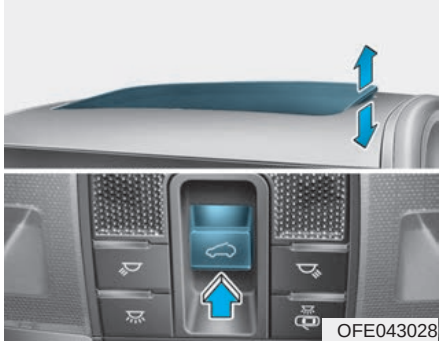
**NOTICE**

**Do not pull or push the power sunshade by hand as such action may damage the power sunshade or cause it to malfunction.**

### Information

**Wrinkles formed on the power sunshade are normal due to material characteristic.**

## Tilt Open/Close




- Push the sunroof switch upward, the sunroof glass tilts open. However, if the power sunshade is closed, the sunshade will open first.
- 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

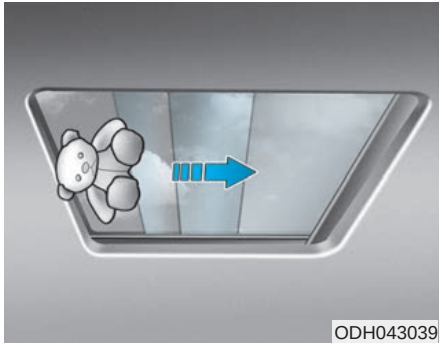
- Push the sunroof switch rearward to the first detent position, the sunroof glass opens. However, if the power sunshade is closed, the power sunshade will open first.

  Push the sunroof switch forward to the first detent position, the sunroof glass closes. However, if the sunroof glass is closed, the power sunshade will close.

- 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 at any point, push the sunroof switch in any direction.

## Automatic Reversal


ODH043039

If the sunroof glass senses any obstacle while it is closing automatically, it will reverse direction then stop at a certain position.

The auto reverse function may not work if an object thin or soft is caught between the sliding sunroof glass and sunroof sash.

**⚠ WARNING**

- **Make sure 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 reversal function. The sunroof glass may reverse direction, but there is a risk of injury.**

**NOTICE**

- **Do not continue to push the sunroof switch after the sunroof is fully opened, closed, or tilted. Damage to the sunroof motor could occur.**
- **Continuous operations such as slide open/close, tilt open/close, etc. may cause the motor or sunroof system to malfunction.**
- **Regularly remove any accumulated dust on the sunroof rail.**
- **Dust accumulated between the sunroof and roof panel can make noise. Open the sunroof and remove dust regularly using a clean cloth.**
- **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 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 extend any luggage outside the sunroof while driving. Vehicle damage may occur if the vehicle suddenly stops.**

**⚠ WARNING**

**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

OFE048418

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

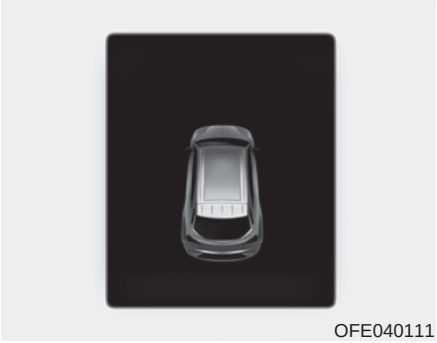
Sunroof resetting procedure:

1. It is recommended to perform the reset procedure with the vehicle engine running. Start the vehicle in P (Park).
2. Make sure the sunroof glass is in the fully closed position. If the sunroof glass is open, push the switch forward until the sunroof glass is fully closed.
3. Release the switch when the sunroof glass is fully closed.
4. Push the switch forward until the sunroof glass moves slightly. Then release the switch.
5. Once again push and hold the sunroof switch forward until the sunroof glass slides open and close. Do not release the switch until the operation is completed. If you release the switch during operation, start the procedure again from step 2.

### Information

**If the sunroof is not reset when the vehicle battery is disconnected or discharged, or the sunroof fuse is blown, the sunroof may not operate normally.**

## Sunroof Open Warning



OFE040111

If the driver turns off the vehicle when the sunroof is not fully closed, the warning chime will sound for several seconds and the sunroof open warning will appear on the cluster display.

Close the sunroof securely when leaving your vehicle.

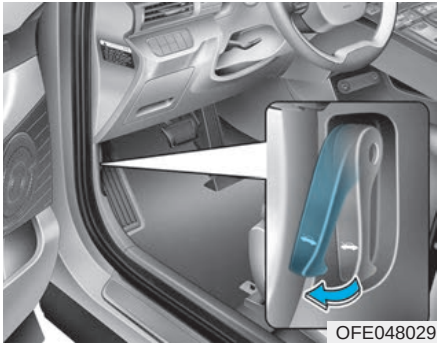
### CAUTION

**Make sure the sunroof is closed fully when leaving your vehicle. If the sunroof is left open, rain or snow may wet the interior of the vehicle. Also, leaving the sunroof open when the vehicle is unattended may invite theft.**

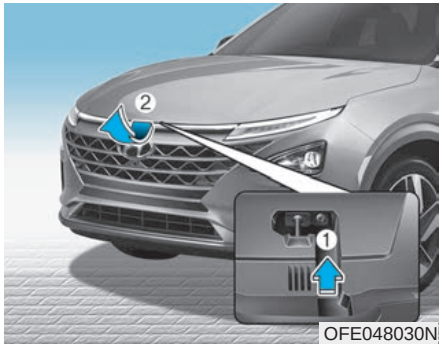
# EXTERIOR FEATURES

## Hood

### *Opening the hood*


OFE048029

1. Park the vehicle and set the parking brake.
2. Pull the release lever to unlatch the hood. The hood should pop open slightly.



OFE048030N

3. Go to the front of the vehicle, raise the hood slightly, push up the secondary hood release lever (1) inside of the hood center and lift the hood (2). After it has been raised about halfway, it will raise completely by itself.

### *Closing the hood*

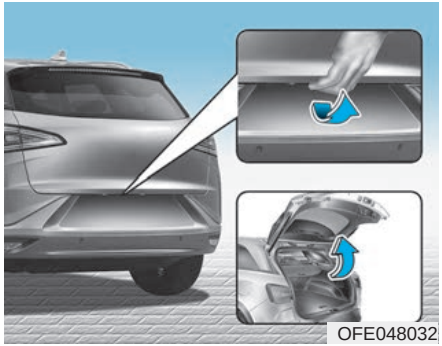
1. Before closing the hood, check the following:
   - All filler caps in fuel cell power module compartment must be correctly installed.
   - Gloves, rags or any other combustible material must be removed from the fuel cell power module compartment.
2. Lower the hood halfway (lifted approximately 12 inches (30 cm) from the closed position) and push down to securely lock in place. Then double check to be sure the hood is secure. If the hood can be raised slightly, it is not securely locked. Open it again and close it with more force.

**⚠ WARNING**

- **Before closing the hood, ensure all obstructions are removed from around the hood opening.**
- **Always double check to be 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 opened may cause a total loss of visibility, which might result in an accident.**
- **Do not move the vehicle with the hood in the raised position, as vision is obstructed, which might result in an accident, and the hood could fall or be damaged.**

## Non-Powered Liftgate (if equipped)

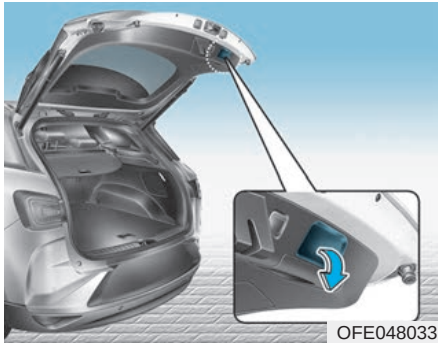
### *Opening the liftgate*


OFE048032

Before attempting to open the liftgate, make sure the vehicle is in P (Park). To open the liftgate, perform one the following:

1. Unlock all doors with the Door Unlock button on your smart key. From outside press the liftgate handle switch and open the liftgate.
2. Press and hold the Liftgate Unlock button on the smart key. From outside press the liftgate handle switch and open the liftgate.
3. With the Smart Key in your possession, press the liftgate handle switch and open the liftgate.

### *Closing the liftgate*


OFE048033

Lower the liftgate lid and press down until it locks. To be sure the liftgate lid is securely fastened, always check by trying to pull it up again without pressing the liftgate handle switch.

**i Information**

**In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.**

**⚠ WARNING**

**The liftgate swings upward. Make sure no objects or people are near the rear of the vehicle when opening the liftgate.**

***NOTICE***

**Make certain that you close the liftgate before driving your vehicle. Possible damage may occur to the liftgate struts and mounting hinges if the liftgate is not closed prior to driving.**

**⚠ WARNING**

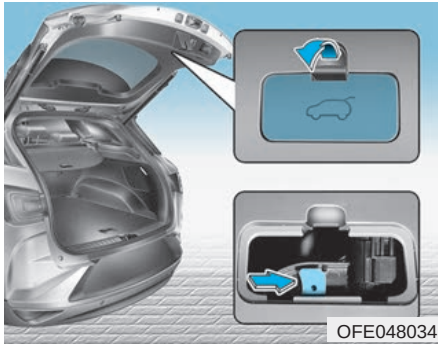
**Always keep the liftgate completely closed while the vehicle is in motion. If it is left open or ajar, poisonous exhaust gases containing carbon monoxide (CO) may enter the vehicle and serious illness or death may result.**

**⚠ WARNING**

OFE048035

**Do not hold on to or try to pull on the liftgate strut. Be aware that the deformation of the liftgate strut may cause vehicle damage and risk of injury.**

### *Emergency liftgate safety release*


OFE048034

Your vehicle is equipped with an emergency liftgate safety release lever located on the bottom of the liftgate inside the vehicle.

To unlock and open the liftgate manually from inside the luggage compartment, perform the following steps:

1. Remove the cover.
2. Push the release lever to the right.
3. Push the liftgate outward and upward.

**⚠ WARNING**

- **Be aware of the location of the emergency liftgate safety release lever in your vehicle and know how to open the liftgate using the safety release lever.**
- **No one should be allowed to occupy the luggage compartment of the vehicle at any time. The luggage compartment is a very dangerous location in the event of a crash.**
- **Use the release lever for emergencies only. Use extreme caution, especially while the vehicle is in motion.**

## Power Liftgate (if equipped)

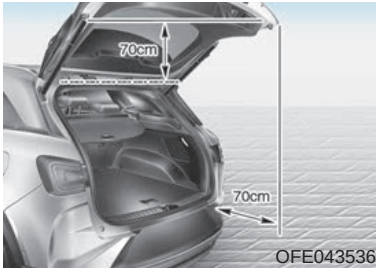
### *Power liftgate operating conditions*

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. Also, the liftgate can be opened only when vehicle speed is below 1.8 mph (3 km/h).

For safety, before attempting to open or close the liftgate, make sure the vehicle is in P (Park).

**⚠ 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.**
-
  OFE048035

  **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.**
- **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.

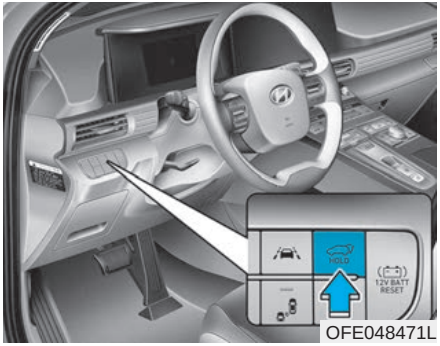
### Information

- 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 instrument cluster 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, Instrument panel)

OFE048036L




OFE048471L

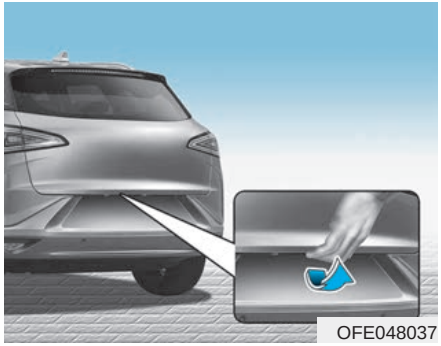
When the liftgate is closed, press the power liftgate open/close button for 1 second. The power liftgate opens with a warning sound.

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.

Also, if the smart key is not within operation range (about 10 m) from the vehicle, power liftgate operation will stop with a warning sound for 5 seconds.

### Power liftgate open/close button (Outside the power liftgate)



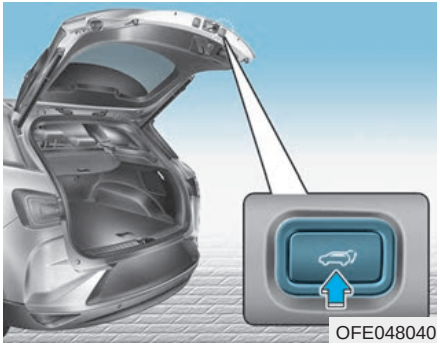
OFE048037

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.

### Power liftgate open/close button (Inside the power liftgate)




Press the power liftgate open/close button. The liftgate opens or closes automatically.

### Automatic reverse

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:

- The automatic reverse feature may not detect the resistance if the detected resistance is below a certain level, or if the liftgate is almost fully closed near the latched position.
- The automatic reverse feature may operate 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.**

**i Information**

**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 → Settings → Door/liftgate → Power liftgate opening speed → Fast/Slow' in the infotainment system. (Default setting is 'Fast')

#### Power liftgate opening height

To adjust the power liftgate opening height, select 'Setup → Settings → Door/liftgate → Power liftgate opening height → Full Open/Level 3/Level 2/Level 1/User height setting' in the infotainment system.

The infotainment system may change after updates. For detailed information on system settings, see the infotainment system web manual.

#### 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.**

### *Resetting the power liftgate*

In some circumstances resetting the power liftgate operation may need to be performed. 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

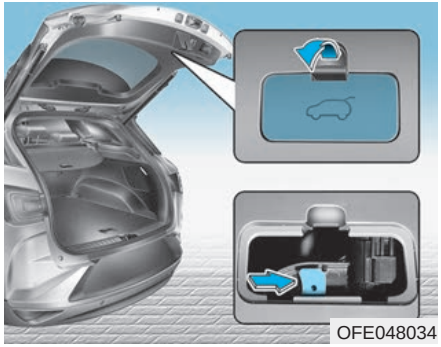
1. With the engine off or running, put the gear in P (Park).
2. Press the power liftgate open/close inner button and outer button simultaneously until a chime sounds.
3. Slowly close the liftgate manually.
4. Press the power liftgate open/close outer button. The power liftgate will open with a chime 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*



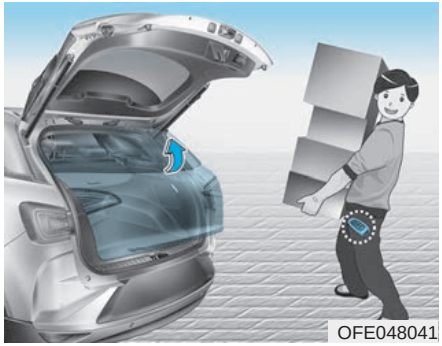

To unlock and open the liftgate manually from inside the luggage compartment, perform the following procedure:

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.

**⚠ WARNING**

- **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 luggage compartment.**
- **No one, including animals, should be allowed to occupy the luggage compartment of the vehicle at any time. The luggage compartment is a very dangerous location in the event of an accident.**
- **Use the release latch for emergencies only. Use extreme caution, especially while the vehicle is in motion.**

## Smart Liftgate (if equipped)


OFE048041

On vehicles equipped with a smart key, the liftgate can be opened with hands-free activation using the Smart Liftgate system.

### *How to use the Smart Liftgate*

The hands-free smart liftgate system can be opened automatically when the following conditions are met:

- The Smart Liftgate option is enabled in the User Settings in the Infotainment system screen.
- The Smart Liftgate is activated and ready 15 seconds after all the doors are closed and locked
- The Smart Liftgate will open when the smart key is detected in the area behind the vehicle for 3 seconds

### Information

**The Smart Liftgate will NOT operate when:**

- **Any door is open, or all doors are closed but not locked**
- **The smart key is detected within 15 seconds from when the doors were closed and locked**
- **For vehicles equipped with illuminated exterior front door handles, if the smart key is detected within 15 seconds from when the doors were closed and locked or if the smart key is within 60 inches (1.5m) from the front door handles**
- **The smart key is in the vehicle.**

1. Setting

To activate the Smart Liftgate, go to "Vehicle settings → Door/Tailgate" and select Smart Tailgate (Liftgate) on the Infotainment system screen.

**For more information refer to the separately supplied Navigation manual.**

2.Detect and Alert

The Smart Liftgate detecting area extends approximately 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 will blink and the chime will sound to alert you that the smart liftgate will open.

### Information

**Do not approach the detecting area if you do not want the liftgate to open. If you have unintentionally entered the detecting area and the hazard warning lights and chime starts to operate, move away from the area behind the vehicle with the smart key. The liftgate will remain closed.**

3. Automatic opening

After the hazard warning lights blink and the chime sounds 6 times, the power liftgate will open.

### WARNING

- **Make certain that you close the liftgate before driving your vehicle.**
- **Make sure there are no people or objects around the liftgate before opening or closing the liftgate.**
- **Make sure objects in the rear cargo area do not come out when opening the liftgate, especially if the vehicle is parked on a grade or incline.**
- **If you keep your vehicle parked and locked on your driveway, you may want to temporarily deactivate the Smart Liftgate system. Otherwise, standing at the rear of the vehicle with the smart key may cause the liftgate to open unintentionally.**

- **The key should be kept out of reach of children. Children may inadvertently open the Smart Liftgate while playing around the rear area of the vehicle.**

### *How to deactivate the Smart Liftgate function using the smart key*

OFE048005

1. Door lock
2. Door unlock
3. Liftgate open/close
4. Panic

If you press any button on the smart key during the Detect and Alert stage, the Smart Liftgate function will be deactivated.

Make sure to be aware of how to deactivate the Smart Liftgate function for emergency situations.

### Information

- **If you press the door unlock button (2), the Smart Liftgate function will be deactivated temporarily. But, if you do not open any door for 30 seconds, the Smart Liftgate function will be activated again.**
- **If you press the liftgate open button (3) for more than 1 second, the liftgate opens.**
- **The Smart Liftgate function will still be activated if you press the door lock button (1) or liftgate open button (3) on the smart key as long as the Smart Liftgate is not already in the Detect and Alert stage.**
- **In case you have deactivated the Smart Liftgate function by pressing the smart key button and opened a door, the Smart Liftgate function can be activated again by closing and locking all doors.**

### *Detecting area*

OFE048042N

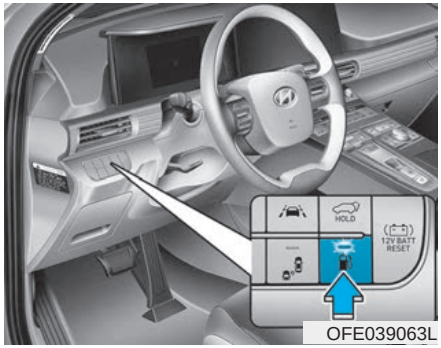
- The Smart Liftgate detecting area extends approximately 20-40 in (50-100 cm) behind the vehicle. If you are positioned in the detecting area and are carrying the smart key, the hazard warning lights will blink and the chime will sound for about 3 seconds to alert you that the smart liftgate will open.
- The alert stops once the smart key is moved outside of the detecting area within the 3 second period.

### *i* Information

- **The Smart Liftgate function may not operate properly if any of the following instances 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 cellular phone.**
  - **Another vehicle's smart key is being operated close to your vehicle.**
- **The 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**

## Fuel Filler Door

### *Opening the fuel filler door*

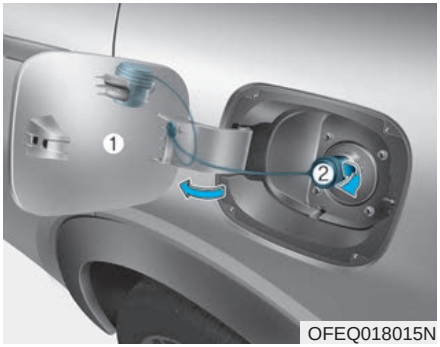


OFE039063L

1. Turn the vehicle off.
2. Push the fuel filler door opener button.

**NOTICE**

- **The fuel filler door does not open if the vehicle is not off.**
- **The fuel filler door may open after several seconds from turning off the vehicle. However, in cold weather, the fuel door may not open for about 45 seconds until the cluster message "Powering down..." disappears. This is for protecting the fuel cell system.**



OFEQ018015N

3. Pull the fuel filler door (1) outward to access the fuel filler cap.
4. Pull the fuel filler cap (2).

### Information

**If the fuel filler door does not open because ice has formed around it, tap lightly or push on the door to break the ice and release the door. Do not pry on the door. If necessary, spray around the door with an approved de-icer fluid (do not use radiator anti-freeze) or move the vehicle to a warm place and allow the ice to melt.**

### *Closing the fuel filler door*

1. Cover the fuel filler with the cap.
2. Close the fuel filler door until it is latched securely.

### WARNING

- **If the fuel filler cap requires replacement, you should use parts for replacement from an authorized Hyundai dealer. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system. you should contact your HYUNDAI dealer for replacement.**
- **If the fuel filler door is not completely closed, the vehicle is not turned on. Close the fuel filler door and turn on the vehicle.**

### WARNING

**Refueling dangers**

**Automotive fuels are flammable materials. When refueling, please note the following guidelines carefully. Failure to follow these guidelines may result in severe personal injury, severe burns or death by fire or explosion.**

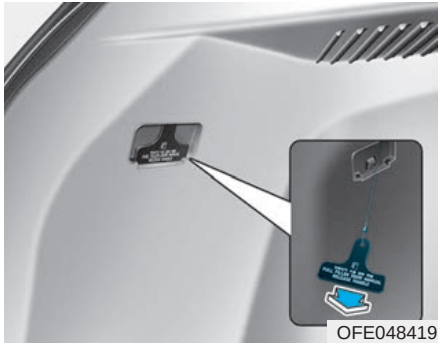
- **Read and follow all warning posted at the gas station facility.**
- **Before touching the fuel nozzle, you should eliminate potentially dangerous static electricity discharge by touching another metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source.**

- **Do not get back into a vehicle once you have begun refueling since you can generate static electricity by touching, rubbing or sliding against any item or fabric (polyester, satin, nylon, etc.) capable of producing static electricity. Static electricity discharge can ignite fuel vapors resulting in rapid burning. If you must reenter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source.**
- **Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors causing a fire.**

- **When refueling, always shut the power off. Once refueling is complete, check to make sure the filler cap and filler door are securely closed, before starting the vehicle.**
- **DO NOT use matches or a lighter and DO NOT SMOKE or leave a lit cigarette in your vehicle while at a gas station especially during refueling.**

  **Automotive fuel is highly flammable and can, when ignited, result in fire.**
- **If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station and then contact the local fire department. Follow any safety instructions they provide.**

## Emergency Fuel Filler Door Release


OFE048419

If the fuel filler door does not open due to the battery discharge and failure of the electrical wiring, open the liftgate and lightly pull the handle towards the arrow direction to open the lid.

### Information

**Do not pull the handle excessively, otherwise the luggage area trim or release handle may be damaged.**

# INSTRUMENT CLUSTER

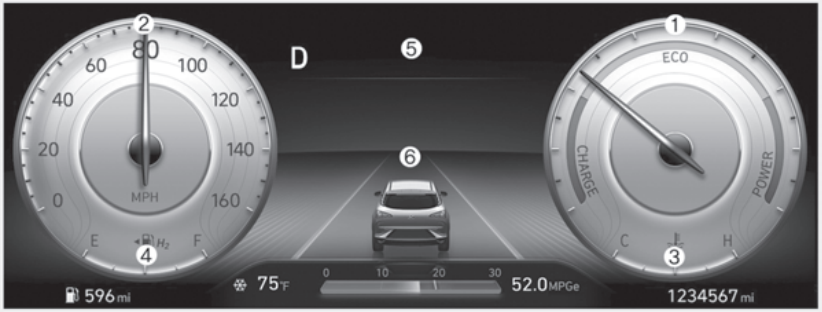
■ Type A

1. Power gauge
2. Speedometer
3. Fuel cell stack temperature gauge
4. Fuel gauge
5. Odometer/Cluster display/Trip computer
6. Warning and indicator lights

**The actual cluster in the vehicle may differ from the illustration.**
**For more details, refer to the "Gauges and Meters" in this chapter.**

OFE048100N

■ Type B



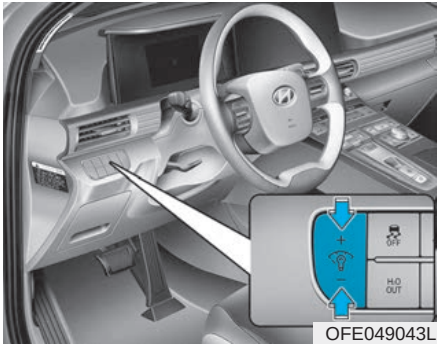

1. Power gauge
2. Speedometer
3. Fuel cell stack temperature gauge
4. Fuel gauge
5. Warning and indicator lights
6. Odometer/Cluster display/Trip computer

**The actual cluster in the vehicle may differ from the illustration.**
**For more details, refer to the "Gauges and Meters" in this chapter.**

OFE041480N

## Instrument Cluster Control

### *Adjusting instrument cluster illumination*



OFE049043L

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

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

**⚠ WARNING**

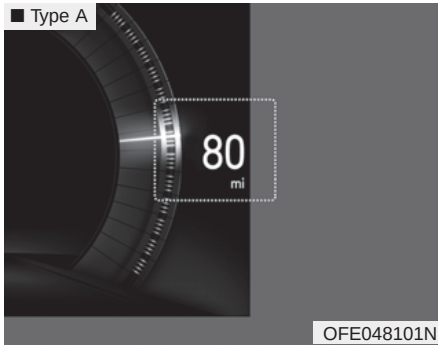
**Never adjust the instrument cluster while driving. Doing so could lead to driver distraction which may cause an accident and lead to vehicle damage, serious injury, or death.**

- The brightness of the instrument panel illumination is displayed.
- If the brightness reaches the maximum or minimum level, a chime will sound.

## Gauges and Meters

### *Speedometer*

■ Type A



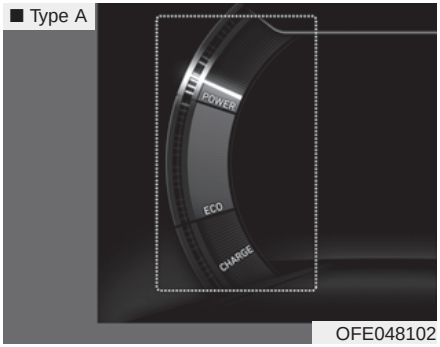
OFE048101N

■ Type B

OFE041481N

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

### *Power gauge*



OFE048102

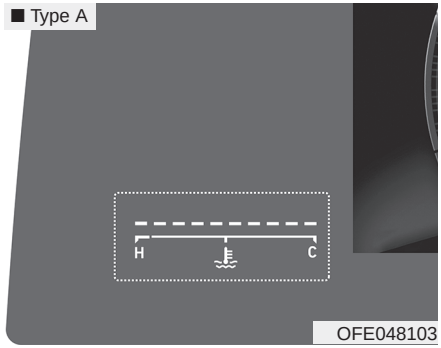
OFE041102N

The power gauge shows the energy consumption rate of the traction motor.

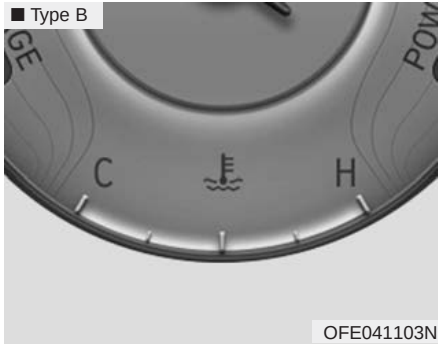
- CHARGE : It shows the charging status of the battery when it is being charged by the regenerative brakes (decelerating or driving on a downhill road).

  The more electric energy is charged, the lower the gauge level.
- ECO : It shows the energy consumption rate during normal driving condition.
- POWER : It shows the energy consumption rate of the vehicle when driving uphill or accelerating. The more electric energy is used, the higher the gauge level.

### *Fuel cell stack temperature gauge*



OFE048103



OFE041103N

This gauge shows the temperature of the fuel cell stack coolant when the POWER button is ON.

Do not continue driving with an overheated fuel cell stack. If your vehicle overheats, have the vehicle inspected by an authorized HYUNDAI dealer.

**NOTICE - Fuel Cell Stack Overheats**

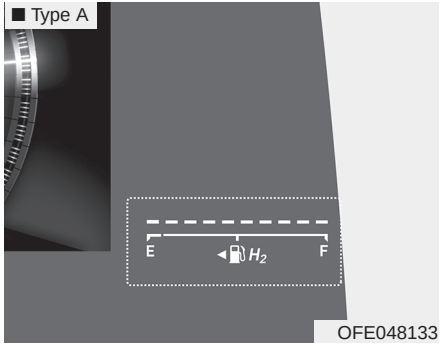
**If the gauge pointer moves beyond the normal range area toward the "H" position, it indicates overheating that may damage the fuel cell stack.**

**⚠ WARNING**

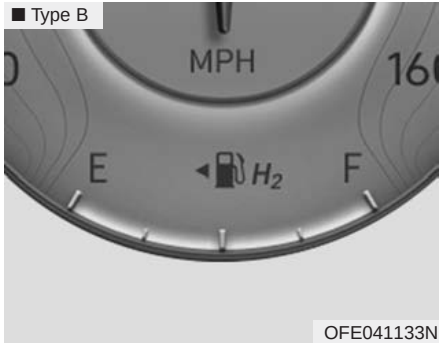
**Radiator Cap**

**Never remove the radiator cap when the fuel cell power module is hot. Otherwise the fuel cell stack coolant may be under pressure and cause severe burns. Wait until the fuel cell power module is cool before adding coolant to the reservoir.**

### *Hydrogen fuel gauge*



OFE048133



OFE041133N

This gauge indicates the approximate amount of fuel remaining in the fuel tank (The fuel tank capacity is given in chapter 8).

The fuel gauge is supplemented by a low fuel warning light which will illuminate when the fuel tank is nearly empty.

**⚠ WARNING**

**Running Out of Fuel**

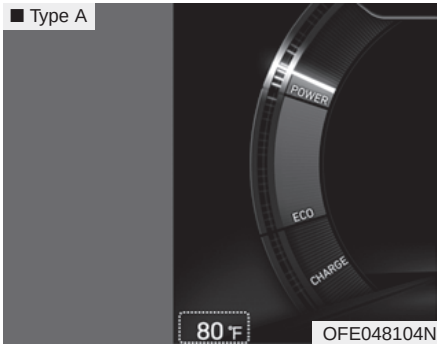
**Running out of fuel can expose vehicle occupants to danger.**

**You must stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the "E" (Empty) level.**

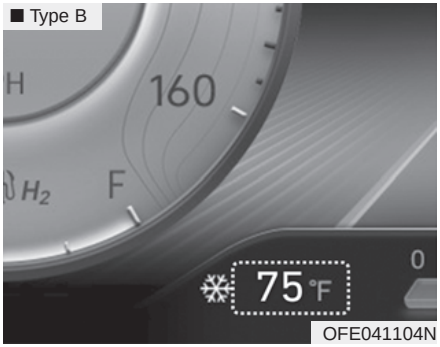
**ℹ Information - Hydrogen Fueling Station**

**According to the hydrogen fueling station condition, the hydrogen fuel may not filled fully.**

### *Outside temperature gauge*



OFE048104N



OFE041104N

This gauge indicates the current outside air temperature by 1 degrees F (1 degrees C).

- Temperature range : -40°F ~ 140°F (-40°C ~ 60°C)

Note that the temperature indicated on the LCD display may not change as quickly as the outside temperature (there may be a slight delay before the temperature changes.)

The temperature unit (from °C to °F or from °F to °C) can be changed by:

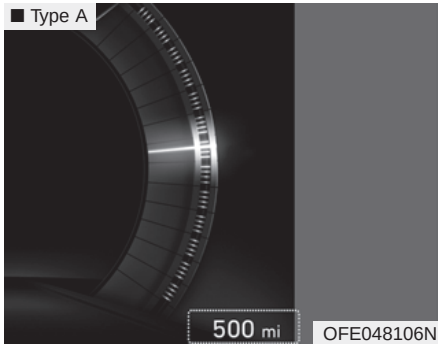
- Press the AUTO button while pressing the OFF button on the climate control unit for 3 seconds
- Go to General settings mode → Unit → Temperature in the Infotainment system display.

Both the temperature unit on the cluster LCD display and climate control screen will change.

### *i* 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.**

### *Odometer*

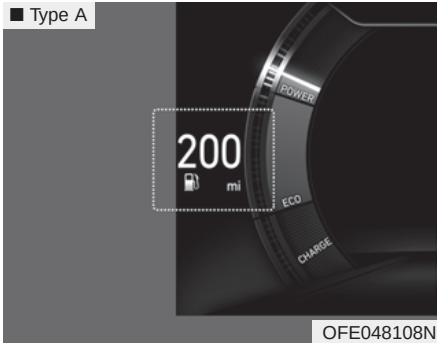


OFE048106N

OFE041106N

The odometer indicates the total distance that the vehicle has been driven and should be used to determine when periodic maintenance should be performed.

### *Range*



OFE048108N

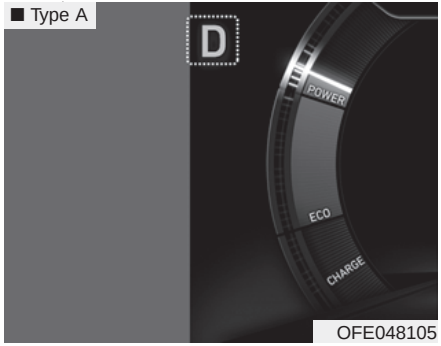
OFE041482N

- The range is the estimated distance the vehicle can be driven with the remaining fuel.
- If the estimated distance is below 1 mi. (1 km), the trip computer will display "---" as range.
- If the hydrogen supply line is empty, the gauge may indicate that the hydrogen is not in the hydrogen tank.

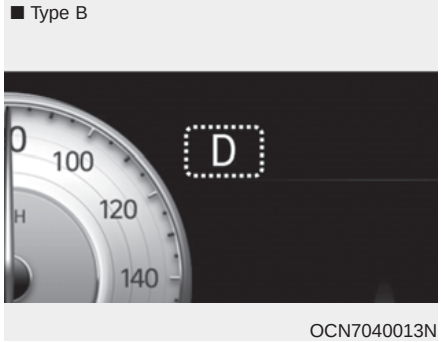
### Information

- **If the vehicle is not on level ground or the battery power has been interrupted, the range function may not operate correctly.**
- **The range may differ from the actual driving distance as it is only an estimate of the available driving range for the vehicle and driving conditions.**
- **The range may vary significantly based on driving conditions, driving habits, and condition of the vehicle.**

### *Gear shift indicator*



OFE048105



OCN7040013N

This indicator displays which gear is selected.

### *Regenerative braking rate indicator*

■ Type A

OFE058136N

■ Type B

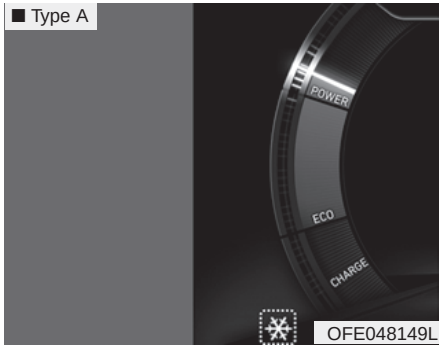
OFE051018N

While using the regenerative brakes, you may select the regenerative braking rate from 0 to 3 by pulling the paddle shifter.

**For more details, refer to "Regenerative Braking System" in chapter 5.**

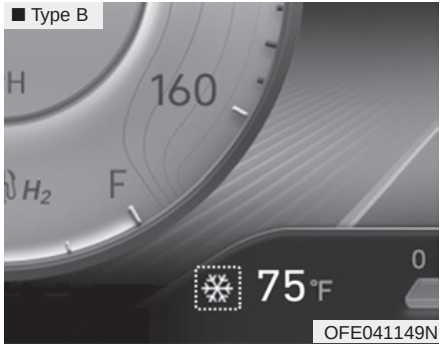
### *Icy road warning light (if equipped)*

■ Type A




OFE048149L

■ Type B




OFE041149N

This warning light is to warn the driver the road may be icy.

When the temperature on the outside temperature gauge is approximately below 40°F (4°C), the Icy Road Warning Light and Outside Temperature Gauge blinks, and then illuminates. Also, the warning chime is sound.

#### Information

**If the icy road warning light appears while driving, you should drive more attentively and safely refraining from over-speeding, rapid acceleration, sudden braking or sharp turning, etc.**

## Warning and Indicator lights

### Information

**Make sure that all warning lights are OFF after starting the vehicle. If any light is still ON, this indicates a situation that needs attention.**

### *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. In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

### *Service Warning Light*

**This warning light illuminates :**

- When the POWER button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a problem with related parts of the fuel cell electric vehicle control system, such as sensors, etc.

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

### *Power Down Warning Light*

**This warning light illuminates :**

- When the vehicle power should be limited due to a malfunction with fuel cell stack.

  If the warning light continuously remains on when the vehicle is in "READY" state, or comes on during driving, this indicates that there may be a malfunction with the fuel cell stack. If this occurs, have the vehicle inspected by an authorized HYUNDAI dealer.

**NOTICE**

**If the warning light turns on again when restarting the vehicle after parking your vehicle on an incline.**

### *Icy Road Warning Light (if equipped)*

This warning light is to warn the driver the road may be icy.

When the temperature on the outside temperature gauge is approximately below 40°F (4°C), the Icy Road Warning Light and Outside Temperature Gauge blinks and then illuminates. Also, the warning chime sounds 1 time.

The Icy Road Warning function can be activated or deactivated from the Vehicle Settings mode in the Infotainment system screen.

**Information**

**If the icy road warning light appears while driving, you should drive more attentively and safely, refraining from over-speeding, rapid acceleration, sudden braking or sharp turning, etc.**

### *Hydrogen Gas Leak Warning Light*

**This warning light illuminates:**

- [Red] When the hydrogen leakage is detected in the vehicle.
- [Yellow] When there is a malfunction with the hydrogen leakage detection sensor.

If the warning light continuously remains on when the vehicle is in "READY" state, or comes on during driving, this indicates that there may be hydrogen leakage or a malfunction with the hydrogen leakage detection sensor. If this occurs, stop the vehicle and have the hydrogen system inspected by an authorized HYUNDAI dealer.

### *Low Fuel Level Warning Light*

**This warning light illuminates:**

When the fuel tank is nearly empty.

**If the fuel tank is nearly empty:**

Add fuel as soon as possible.

### *Supplemental Restraint System Warning Light*

**This warning light illuminates:**

- When the POWER button is in the ON position.
  - It illuminates for approximately 6 seconds and then goes off.
- When there is a malfunction with the SRS.

  In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

### *Seat Belt Warning Light*

This warning light informs the driver that the seat belt is not fastened.

**For more details, refer to the "Seat Belts" in chapter 2.**

### *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 Brake Warning light (red) and Regenerative Brake Warning Light (yellow) to illuminate simultaneously.

In this case, drive safely and have your vehicle inspected by an authorized HYUNDAI dealer.

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

### *Parking Brake & Brake Fluid Warning Light*

**This warning light illuminates:**

- When the POWER button is in the ON position.
  - It illuminates for approximately 3 seconds.
  - It remains on if the parking brake is applied.
- When the parking brake is applied.
- When 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 reservoir is low.

**If the brake fluid level in the reservoir is low:**

1. Drive carefully to the nearest safe location and stop your vehicle.
2. With the vehicle turned off, check the brake fluid level immediately and add fluid as required **(For more details, refer to "Brake Fluid" in chapter 7)**. After adding brake fluid, check all brake components for fluid leaks. 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 the vehicle inspected by an authorized HYUNDAI dealer.

**Dual-diagonal braking system**

Your vehicle is equipped with dual-diagonal braking systems. This means you still have braking on two wheels even if one of the dual systems should fail.

With only one of the dual systems working, more than normal pedal travel and greater pedal pressure is required to stop the vehicle.

Also, the vehicle will not stop in as short a distance with only a portion of the brake system working.

**⚠ WARNING**

**Parking Brake & Brake Fluid Warning Light**

**Driving the vehicle with a warning light ON is dangerous. If the Parking Brake & Brake Fluid Warning Light illuminates with the parking brake released, it indicates that the brake fluid level is low.**

**In this case, have your vehicle inspected by an authorized HYUNDAI dealer.**

### *Anti-lock Brake System (ABS) Warning Light*

**This warning light illuminates:**

- When the POWER button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the ABS (The normal braking system will still be operational without the assistance of the anti-lock brake system).

  In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

### *Electronic Brake Force Distribution (EBD) System Warning Light*

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

When the ABS and regular brake system may not work normally.

In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

**⚠ WARNING**

**Electronic Brake Force Distribution (EBD) System Warning Light**

**When both ABS and Parking Brake & Brake Fluid Warning Lights are on, the brake system will not work normally and you may experience an unexpected and dangerous situation during sudden braking.**

**In this case, avoid high speed driving and abrupt braking.**

**In this case, have your vehicle inspected by an authorized HYUNDAI dealer.**

**Information - Electronic Brake Force Distribution (EBD) System Warning Light**

**When the ABS Warning Light is on or both ABS and Parking Brake & Brake Fluid Warning Lights are on, the speedometer, odometer, or tripmeter may not work. Also, the MDPS Warning Light may illuminate and the steering effort may increase or decrease.**

**In this case, have your vehicle inspected by an authorized HYUNDAI dealer.**

### *Motor Driven Power Steering (MDPS) Warning Light*

**This warning light illuminates:**

- When the POWER button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the MDPS.

  In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

### *Charging System Warning Light (for 12 V battery)*

**This warning light illuminates:**

- When the 12-volt battery level is low or a failure occurs on the charging system such as LDC.
- If the warning light turns on while driving, move the vehicle to a safe location, turn off and turn on the vehicle again, and check if the warning light turns off. If the warning light remains on, have the vehicle inspected by an authorized HYUNDAI dealer.
- Even if the warning light turns off, have the vehicle inspected by an authorized HYUNDAI dealer.

  If you drive the vehicle while the warning light is on, vehicle speed may be limited and the 12-volt battery may be discharged.

❊ LDC : Low voltage DC-DC Converter.

### *Low Tire Pressure Warning Light*

**This warning light illuminates:**

- When the POWER button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When one or more of your tires are significantly underinflated (The location of each underinflated tire is displayed on the LCD display).

**For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.**

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

When there is a malfunction with the TPMS.

In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.**

**⚠ WARNING**

**Safe Stopping**

- **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.**

### *Electronic Parking Brake (EPB) Warning Light*

EPB

**This warning light illuminates:**

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

  In this case, have the vehicle inspected by an authorized HYUNDAI dealer.

**i Information**

**The Electronic Parking Brake (EPB) Warning Light may illuminate when the Electronic Stability control (ESC) Indicator Light comes on to indicate that the ESC is not working properly (This does not indicate malfunction of the EPB).**

### *AUTO HOLD Indicator Light*

AUTO HOLD

**This indicator light illuminates:**

- [White] When you activate the auto hold system by pressing the AUTO HOLD switch.
- [Green] When you stop the vehicle completely by depressing the brake pedal with the auto hold system activated.
- [Yellow] When there is a malfunction with the auto hold system.

  In this case, have the vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to "Auto Hold" in chapter 5.**

### *Forward Safety warning light (if equipped)*

**This warning light illuminates :**

- When the POWER button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When FCA is turned off.
- When the radar sensor or cover is blocked with dirt or snow. Check the sensor and cover and clean them by using a soft cloth.
- When there is a malfunction with FCA. In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to "Forward Collision-Avoidance Assist (FCA)" in chapter 5.**

### *Lane Safety indicator light (if equipped)*

**This indicator light illuminates:**

- [Green] When the function operating conditions are satisfied for LKA.
- [White] When system operating conditions are not satisfied or when the sensor does not detect the lane line.
- [Yellow] When there is a malfunction with Lane Keeping Assist (LKA).

In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to "Lane Keeping Assist (LKA)" in chapter 5.**

### *LED Headlight Warning Light (if equipped)*

**This warning light illuminates:**

- When the POWER button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the LED headlight.

In this case, have the vehicle inspected by an an authorized HYUNDAI dealer.

**This warning light blinks:**

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

In this case, have the vehicle inspected by an an authorized HYUNDAI dealer.

**NOTICE**

**Continuous driving with the LED Headlight Warning Light on or blinking can reduce LED headlight life.**

### *Master Warning Light*

**This warning light illuminates:**

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

- Forward Collision-Avoidance Assist malfunction
- Forward Collision-Avoidance Assist radar blocked
- Blind-Spot Collision-Avoidance Assist malfunction
- Blind-Spot Collision-Avoidance Assist radar blocked
- LED headlight malfunction
- High Beam Assist malfunction
- Smart Cruise Control malfunction
- Smart Cruise Control radar blocked
- Tire Pressure Monitoring System (TPMS) malfunction

To identify the details of the warning, look at the cluster display.

### *Electronic Stability Control (ESC) Indicator Light*

**This indicator light illuminates:**

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

  In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

**This indicator light blinks:**

While the ESC is operating.

**For more details, refer to "Electronic Stability Control (ESC)" in chapter 5.**

### *Electronic Stability Control (ESC) OFF Indicator Light*

**This indicator light illuminates:**

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

**For more details, refer to "Electronic Stability Control (ESC)" in chapter 5.**

### *Immobilizer Indicator Light*

**This indicator light illuminates for up to 30 seconds:**

When the vehicle detects the smart key in the vehicle with the POWER button in the ACC or ON position.

- At this time, you can start the vehicle.
- The indicator light goes off after starting the vehicle.

**This indicator light blinks for a few seconds:**

When the smart key is not in the vehicle.

- At this time, you cannot start the vehicle.

**This indicator light illuminates for 2 seconds and goes off:**

If the smart key is in the vehicle and the POWER button is ON, but the vehicle cannot detect the smart key.

In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

**This indicator light blinks:**

- When the battery voltage of the smart key is low.
  - At this time, you can not start the vehicle. However, you can start the if you press the POWER button with the smart key. **(For more details, refer to "Starting the vehicle" in chapter 5)**.
- When there is a malfunction with the immobilizer system.

  In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

### *Turn Signal Indicator Light*

**This indicator light blinks:**

When you operate the turn signal indicator.

If any of the following occurs, there may be a malfunction with the turn signal system.

- The turn signal indicator light illuminates but does not blink
- The turn signal indicator light blinks rapidly
- The turn signal indicator light does not illuminate at all

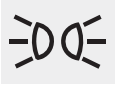
If either of these conditions occur, have your vehicle inspected by an authorized HYUNDAI dealer.

### *High Beam Indicator Light*

**This indicator light illuminates:**

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

### *Light ON Indicator Light*



**This indicator light illuminates:**

When the tail lights or headlights are on.

### *ECO Mode Indicator Light*

**This indicator light illuminates :**

When you select "ECO" mode as drive mode.

**For more details, refer to "Drive Mode Integrated Control System" in this chapter.**

## Cluster Display Messages

### *Shift to P*

This warning message is displayed if you try to turn off the vehicle with the gear in the N (Neutral) position.

At this time, the POWER button changes to the ACC position (If you press the POWER button once more, it will turn to the ON position).

### *Low Key Battery*

This warning message is displayed if the battery of the smart key is discharged while changing the POWER button to the OFF position.

### *Press POWER button while turning wheel*

This warning message is displayed if the steering wheel does not unlock normally when the POWER button is pressed.

You should press the POWER button while turning the steering wheel right and left.

### *Check Steering Wheel Lock System*

This warning message is displayed if the steering wheel does not lock normally while the POWER button changes to the OFF position.

### *Press brake pedal to start vehicle*

This warning message is displayed if the POWER button changes to the ACC position twice by pressing the button repeatedly without depressing the brake pedal.

You can start the vehicle by depressing the brake pedal.

### *Key not in vehicle*

This warning message is displayed if the smart key is not in the vehicle when you press the POWER button.

When attempting to start the vehicle, always have the smart key with you.

### *Key not detected*

This warning message is displayed if the smart key is not detected when you press the POWER button.

### *Press POWER button again*

This message is displayed if you were unable to start the vehicle when the POWER button was pressed.

If this occurs, attempt to start the vehicle by pressing the POWER button again.

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

### *Press POWER button with key*

This warning message is displayed if you press the POWER button while the warning message "Key not detected" is displayed.

At this time, the immobilizer indicator light blinks.

### *Check BRAKE SWITCH fuse*

This warning message is displayed if the brake switch fuse is disconnected.

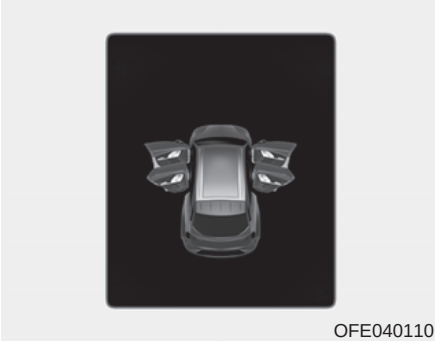
You need to replace the fuse with a new one before starting the vehicle.

If that is not possible, you can start the vehicle by pressing the POWER button for 10 seconds in the ACC position.

### *Shift to P to start vehicle*

This warning message is displayed if you try to start the vehicle without shifting to the P (Park) position.

### *Door / Hood / Liftgate open*



OFE040110

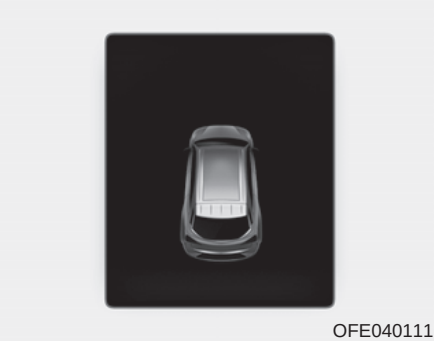
This warning is displayed indicating which door, or the hood, or the liftgate is open.

**⚠ CAUTION**

**Before driving the vehicle, you should confirm that the door/hood/liftgate is fully closed.**

**Also, check there is no door/hood/liftgate open warning light or message displayed on the instrument cluster.**

### *Sunroof open*



OFE040111

This warning is displayed if you turn off the vehicle when the sunroof is open.

### *Low Pressure*

OTM040022L

This warning message is displayed if the tire pressure is low. The corresponding tire on the vehicle will be illuminated.

**For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.**

### *Check headlight (if equipped)*

This warning message is displayed if the headlights are not operating properly. The headlight bulb may need to be replaced.

#### Information

**Make sure to replace the burned out bulb with a new one of the same wattage rating.**

**For more details, refer to "Bulb Wattage" in chapter 8.**

### *Check headlight LED (if equipped)*

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

### *Check headlight FAN (if equipped)*

This warning message is displayed if there is a problem with headlight fan. Have the vehicle inspected by an authorized HYUNDAI dealer.

### *Lights Mode*

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

### *Wiper*

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

### *Check Virtual Engine Sound System*

OFE041153N

This message is displayed when there is a problem with the Virtual Engine Sound System (VESS).

In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

### *Check HBA (High Beam Assist) system*

This warning message is displayed if there is a problem with the High Beam Assist. Have the vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to “High Beam Assist (HBA)” in this chapter.**

### *Check FCA (Forward Collision Avoidance Asst.) (if equipped)*

This warning message is displayed if there is a problem with the Forward Collision-Avoidance Assist. Have the vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to "Forward Collision-Avoidance Assist (FCA)" in chapter 5.**

### *Check SCC (Smart Cruise Control) system (if equipped)*

This warning message is displayed if there is a problem with the Smart Cruise Control. Have the vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to "Smart Cruise Control (SCC)" in chapter 5.**

### *Check LKA (Lane Keep Assist) system (if equipped)*

This warning message is displayed if there is a problem with the Lane Keeping Assist. Have the vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to “Lane Keeping Assist (LKA)” in chapter 5.**

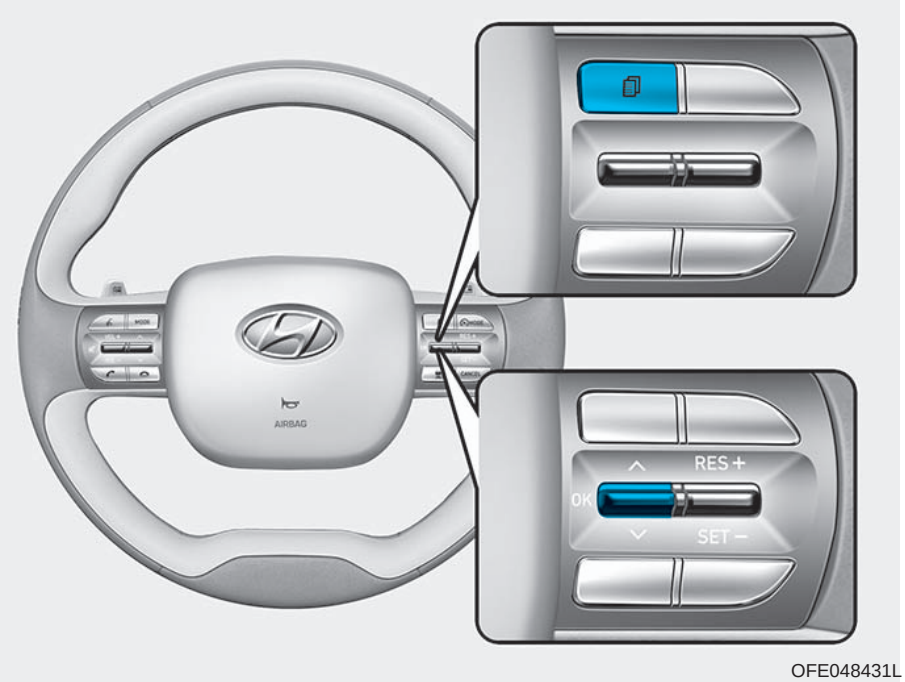
### *Check DAW (Driver Attention Warning) system (if equipped)*

This warning message is displayed if there is a problem with the Driver Attention Warning. Have the vehicle inspected by an authorized HYUNDAI dealer.

**For more details, refer to “Driver Attention Warning (DAW)” in chapter 5.**

# CLUSTER DISPLAY

## Cluster Display Control




OFE048431L

The cluster display modes can be changed by using the control buttons.

(1) : MODE button for changing modes

(2) ∧, ∨ : MOVE switch for changing items

(3) OK : SELECT/RESET button for setting or resetting the selected item

## Cluster Display Modes

| | Menu | | | |
|---|---|---|---|---|
| | Trip Computer | TBT | Assist | Master warning |
| Up/Down | Consumption Info | Route Guidance | Driver Attention Warning | The Master Warning mode displays warning messages related to the vehicle when one or more systems is not operating normally. |
| | Accumulated Info | Destination Info | Tire Pressure | |
| | Drive Info | | | |
| | Digital Speedometer | | | |

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

### *Trip computer mode*

■ Type A

OFE048154N

■ Type B

OFE040502E

The trip computer mode displays information related to vehicle driving parameters including fuel economy, tripmeter information and vehicle speed.

**For more details, refer to "Trip Computer" in this chapter.**

### *Turn By Turn (TBT) mode*

OIK047147N

This mode displays the state of the navigation.

### *Information mode*

OFE041121N

#### Tire Pressure

This mode displays information related to Tire Pressure.

**For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.**

■ Type A

OFE048156L

■ Type B

OIG059288L

### Driver Attention Warning

This mode displays information related to Driver Attention Warning.

**For more details, refer to "Driver Attention Warning (DAW)" in chapter 5.**

### Warning messages

If one of followings occurs, warning messages will be displayed on the cluster display for several seconds.

- Forward Collision-Avoidance Assist malfunction (if equipped)
- Blind-Spot Collision-Avoidance Assist malfunction (if equipped)
- High Beam Assist malfunction (if equipped)
- Exterior lamp malfunction (if equipped)
- Tire Pressure Monitoring System (TPMS, if equipped)

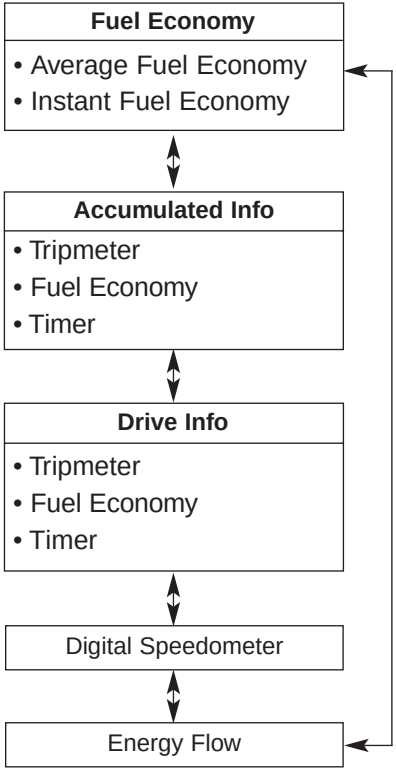
# TRIP COMPUTER

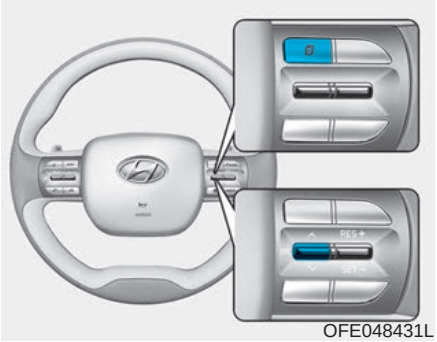
The trip computer is a microcomputer-controlled driver information system that displays information related to driving.

## Information

**Some driving information stored in the trip computer (for example Average Vehicle Speed) resets if the battery is disconnected.**

### *Trip modes*

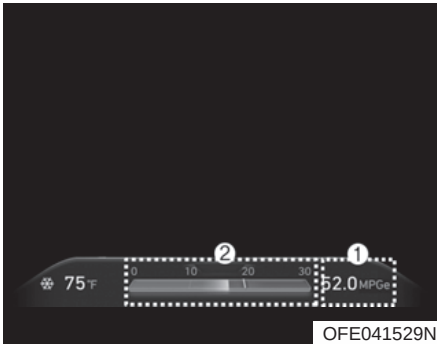



OFE048431L

To change the trip mode, toggle the "∧, ∨" switch on the steering wheel.

### *Average fuel economy/ Instant fuel economy*



OFE041529N

**Average Fuel Economy (1)**

- The average fuel economy is calculated by the total driving distance and fuel consumption since the last average fuel economy reset.
- The average fuel economy can be reset both manually and automatically.

**Manual reset**

To clear the average fuel economy manually, press the OK button on the steering wheel for more than 1 second when the average fuel economy is displayed.

**Automatic reset**

To automatically reset the average fuel economy, select between "After Ignition" or "After Refueling" in the Vehicle Settings mode in the Infotainment system screen.

- After ignition: When the vehicle has been OFF for 4 hours or longer the average fuel economy will reset automatically.
- After refueling: The average fuel economy will reset automatically after refueling.

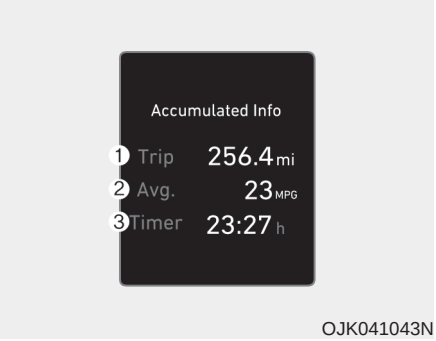
**Information**

**The vehicle must be driven for a minimum of 0.19 miles (300 meters) since the last ignition key cycle before the average fuel economy will be recalculated.**

**Instant Fuel Economy (2)**

- The instantaneous fuel economy is displayed according to the bar graph in the LCD display while driving.

### *Accumulated Info display*




OJK041043N

This display shows the accumulated trip distance (1), the average fuel economy (2), and the total driving time (3).

The information is accumulated starting from the last reset.

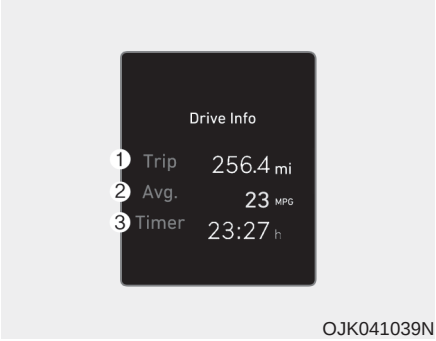
To reset the details, press and hold the OK button when viewing the Accumulated driving info. The trip distance, the average fuel economy, and total driving time will reset simultaneously.

The accumulated driving information will continue to be counted while the vehicle is still running (for example, when the vehicle is in traffic or stopped at a stop light).

#### Information

**The vehicle must be driven for a minimum of 0.19 miles (300 meters) since the last ignition key cycle before the average fuel economy will be recalculated.**

### *Drive Info display*




OJK041039N

This display shows the trip distance (1), the average fuel economy (2), and the total driving time (3).

The information is combined for each ignition cycle. However, when the vehicle has been OFF for 4 hours or longer the Drive Info screen will reset.

To reset the details, press and hold the OK button when viewing the Drive Info. The trip distance, the average fuel economy, and total driving time will reset simultaneously.

The driving information will continue to be counted while the vehicle is in the ready ( ) mode. (for example, when the vehicle is in traffic or stopped at a stop light).

### Information

**The vehicle must be driven for a minimum of 0.19 miles (300 meters) since the last ignition key cycle before the average fuel economy will be recalculated.**

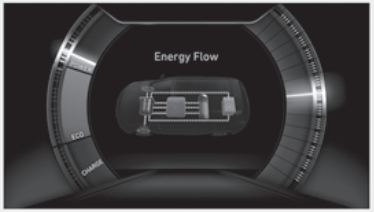
### *Digital speedometer*

OIK047151N

This digital speedometer display shows the speed of the vehicle.

### *Energy Flow*

■ Type A




OFE048163L

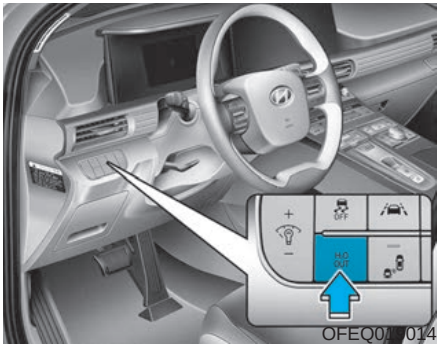
■ Type B

OFE041131N

The fuel cell vehicle system informs the drivers its energy flow in various operating modes. While driving, the current energy flow is specified in 3 modes.

**For more details, refer to "Energy Flow" in the fuel cell Vehicle Guide provided in front of the owner's manual.**

## $H_2O$ OUT




Press the $H_2O$ OUT button to discharge accumulated water from the exhaust. The vehicle must be ON for the blower to operate.

It prevents floor contamination / freezing due to discharge of accumulated water at the lower part of the vehicle or the muffler during the operation. (for example, Garage, etc.)

Please pre-drain remain water prior to sea shipping to cryogenic areas or long-term storage (When starting vehicle in winter after starting off in fall) to prevent freezing.

$H_2O$ OUT cannot operate when engine is off.

### *Water release*

OFE050192L

This message displays when releasing accumulated water.

### *Water complete*

OFE050191L

This message displays when water release completed.

### *Water release condition*

OFE050190L

This message displays when the $H_2O$ OUT button will not activate the blower.

## CSD (Cold Shut-Down)

CSD (Cold Shut-Down) will automatically discharge accumulated water after turning off the vehicle to prevent accumulated water from getting frozen in the fuel cell systems during the winter.
When CSD activates, the amount of discharged water varies depending on driving time, driving mode, and last time the accumulated water was manually discharge with the $H_2O$ OUT button.

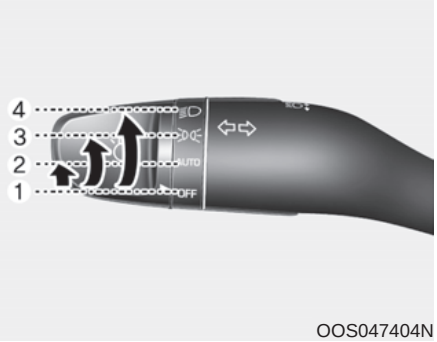
**NOTICE**

- **If the $H_2O$ OUT button is operated while driving or stopping before entering the garage or underground parking lot, the amount of discharging water after turning off the key in CSD mode will be insignificant.**
- **It is not necessary to press the $H_2O$ OUT button, but having it available allows you to control when water is purged from the system.**

# EXTERIOR LIGHTS

## Lighting Control

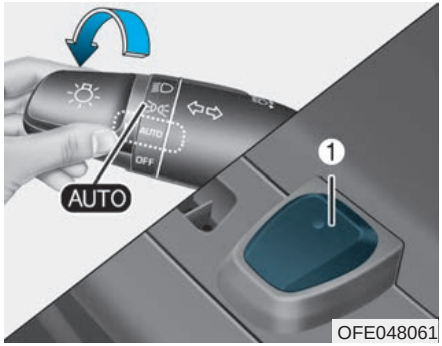
To operate the lights, turn the knob at the end of the control lever to one of the following positions:



OOS047404N

1. OFF
2. AUTO headlight
3. Parking lamp
4. Headlight

### *AUTO headlight (if equipped)*



OFE048061

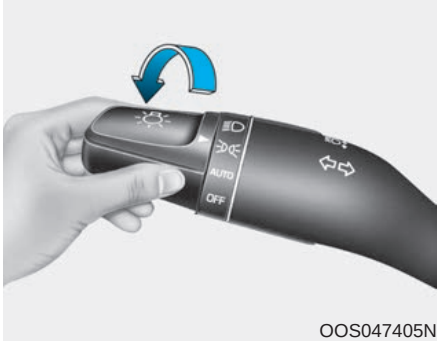
The parking lamp and headlight will be turned ON or OFF automatically depending on the amount of daylight as measured by the ambient light sensor (1) on the crash pad.

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 (1) located in front of the instrument panel.**
- **Do not clean the sensor using a window cleaner, the cleanser 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 lamp ( )*



OOS047405N

The parking lamp, license plate lamp and instrument panel lamp are turned ON.

### *Headlight ( )*

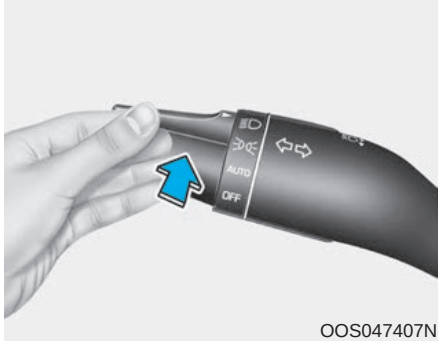
OOS047406N

The headlight, parking lamp, license plate lamp and instrument panel lamp are turned ON.

**Information**

**The POWER button must be in the ON position to turn on the headlight.**

## High Beam Operation



OOS047407N

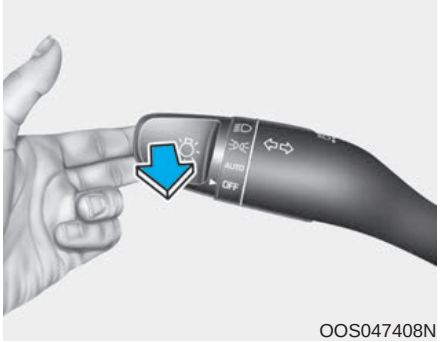
To turn on the high beam headlight, push the lever away from you. The lever will return to its original position.

The high beam indicator will light when the headlight high beams are switched on.

To turn off the high beam headlight, pull the lever towards you. The low beams will turn on.

**WARNING**

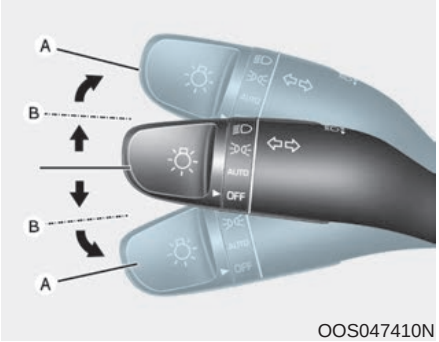
**Do not use high beam when there are other vehicles approaching you. Using high beam could obstruct the other driver's vision.**




OOS047408N

To flash the high beam headlight, pull the lever towards you, then release the lever. The high beams will remain ON as long as you hold the lever towards you.

## Turn Signals and Lane Change Signals




OOS047410N

To signal a turn, push down on the lever for a left turn or up for a right turn in position (A).

If the direction change is completed, the operation is automatically canceled. However, if the operation is not canceled automatically, set the lever to the center.

If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

### *One-touch turn signal function*

To activate the One Touch Turn Signal function, push the turn signal lever up or down to position (B) and then release it.

The lane change signals will blink 3, 5 or 7 times.

You can activate or deactivate the One Touch Turn Signal function or choose the number of blinks (3, 5, or 7) from the Vehicle Settings mode in the Infotainment system screen.

**For more details, refer to the separately supplied Navigation manual.**

## Battery Saver Function

The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the parking lamp when the driver turns the vehicle off and opens the driver-side door.

With this feature, the parking lamps will turn off automatically if the driver parks on the side of road at night.

However, the position lamps stay ON even when the driver-side door is opened if the headlight switch is turned to the position lamp or AUTO (if equipped) position after the engine is turned off.

If necessary, to keep the lamps on turn the position lamps OFF and ON again using the headlight switch on the steering column after the engine is turned off.

## Headlight Time-out Function (if equipped)

If the POWER button is placed in the ACC position or the OFF position with the headlights ON, the headlights (and/or parking lamps) remain on for about 5 minutes. However, 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 lamps) are turned off after 15 seconds.

The headlights (and/or parking lamps) can be turned off by pressing the lock button on the smart key twice or turning the light switch to the OFF or AUTO position.

You can activate or deactivate the Headlight Delay function from the Vehicle Settings mode (Light) on the Infotainment system screen.

**For more details, refer to the separately supplied Navigation manual.**

***NOTICE***

**If the driver gets out of the vehicle through other doors (except driver's door), the battery saver function does not operate and the headlight delay function does not turn off automatically. Therefore, It causes the battery to be discharged. In this case, make sure to turn off the lamp before getting out of the vehicle.**

## Daytime Running Light (DRL)

The Daytime Running Lights (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 will turn the dedicated lamp OFF when:

1. The headlights are in the ON position.
2. The vehicle is turned off.

## Headlight Leveling Device

Headlight leveling device automatically adjusts the headlight beam level according to the number of passengers and loading weight in the luggage area.

It also adjusts to the appropriate headlight beam level for various situations.

**⚠ WARNING**

**If the function does not work properly, have your vehicle inspected by an authorized HYUNDAI dealer. Do not attempt to inspect or replace the wiring yourself.**

## Welcome System (if equipped)

### *Welcome light*

OFE048062N

#### Puddle lamp

With all the doors (and liftgate) closed and locked, the puddle lamp will come on for about 15 seconds if any of the below is performed.

1. If 'Convenience → Welcome mirror/light → On door unlock' is selected in the vehicle Settings mode on the Infotainment system screen,
   - the lamps will turn on when the door lock button is pressed on the smart key.

- the lamp will turn on when the button of the outside door handle is pressed with the smart key in possession.

2. If both 'Convenience → Welcome mirror/light → On door unlock' and 'Convenience → Welcome mirror/light → On driver approach' is selected in the vehicle Settings mode on the Infotainment system screen, the lamp will turn on when the vehicle is approached with the smart key in possession.

You can activate or deactivate Welcome Light function from the vehicle Settings mode on the Infotainment system screen.

**For more details, refer to the separately supplied "Navigation manual".**

### Headlight and parking lamp

When the headlight (lamp switch in the headlight or AUTO position) is on and all doors (and liftgate) are locked and closed, the parking lamp and headlight will come on for 15 seconds when the door unlock button is pressed on the remote key or smart key.

At this time, if you press the door lock or unlock button, the parking lamp and headlight will turn off immediately.

### *Interior lamp*

When the interior lamp switch is in the DOOR position and all doors (and liftgate) are closed and locked, the room lamp will come on for 30 seconds if any of the below is performed.

- When the door unlock button is pressed on the remote key or smart key.
- When the button of the outside door handle is pressed with the smart key in possession.

At this time, if you press the door lock or unlock button on the smart key the room lamp will turn off immediately.

# INTERIOR LIGHTS

**⚠ WARNING**

**Do not use the interior lights when driving in the dark. The interior lights may obscure your view and cause an accident.**

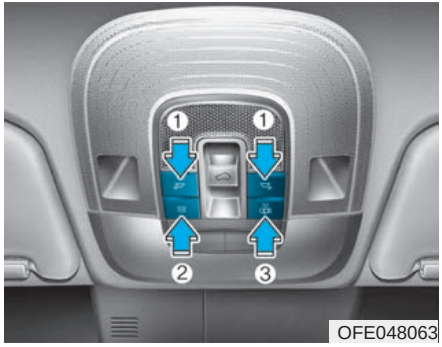
***NOTICE***

**Do not use the interior lights for extended periods when the vehicle is turned off or the battery will discharge.**

## Interior Lamp AUTO Cut

The interior lamps will automatically go off approximately 20 minutes after the vehicle is turned off and the doors are closed. If a door is opened, the lamp will go off 40 minutes after the vehicle is turned off. If the doors are locked by the remote key or smart key and the vehicle enters the armed stage of the theft alarm system, the lamps will go off five seconds later.

## Front Lamps



OFE048063

**Front Map Lamp (1) :**

Press either lenses (Type A) or switches ( , Type B) to turn the map lamp on or off. This light produces a spot beam for convenient use as a map lamp at night or as a personal lamp for the driver and the front passenger.

**Front Room Lamp (2) ( ) :**

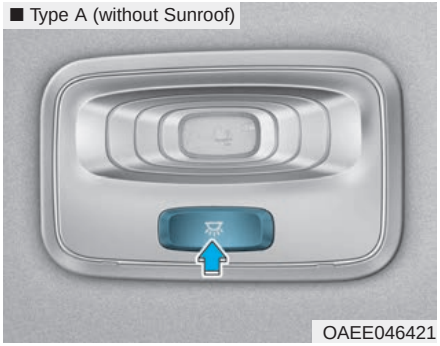
Press the button to turn the front and rear room lamps on or off.

**Front Door Lamp (3) ( ) :**

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 approximately 30 seconds as long as any door is not opened. The front and rear room lamps go out gradually after approximately 30 seconds if the door is closed. However, if the POWER button is in the ON position or all doors are locked, the front and rear lamps will turn off. If a door is opened with the POWER button in the ACC position or the OFF position, the front and rear lamps stay on for about 20 minutes.

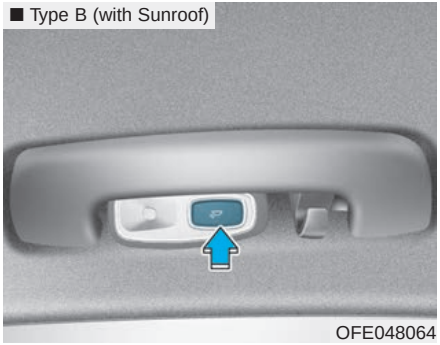
## Rear Lamp

■ Type A (without Sunroof)



OAEE046421

■ Type B (with Sunroof)



OFE048064

**Rear Room Lamp ( ):**

Press this switch to turn the rear room lamp on and off.

## Luggage Compartment Lamp

OFE048065L

The luggage compartment lamp comes on when the liftgate is opened. If the liftgate is continuously opened, the luggage compartment lamp will turn off after 20 minutes.

## Vanity Mirror Lamp

OOS047055

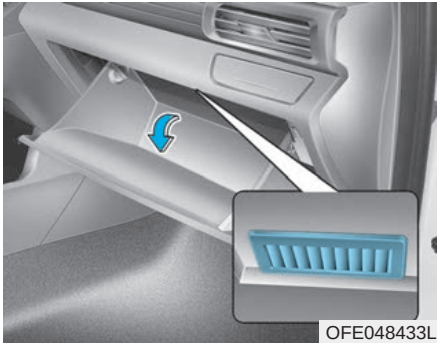
Push the switch to turn the light on or off.

- : The lamp will turn on if this button is pressed.
- ◯ : The lamp will turn off if this button is pressed.

**NOTICE**

**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


OFE048433L

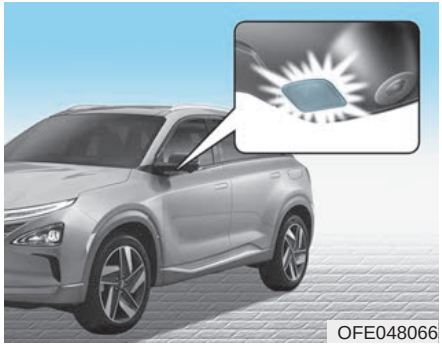
The glove box lamp comes on when the glove box is opened.

If the glove box is not closed, the lamp will turn off after 20 minutes.

**NOTICE**

**To prevent unnecessary charging system drain, close the glove box securely after using the glove box.**

## Puddle Lamp (if equipped)


OFE048066

### Welcome light

When all doors (and liftgate) are closed and locked, the puddle lamp will come on for 15 seconds if the door is unlocked by the remote key or smart key or outside door handle button.

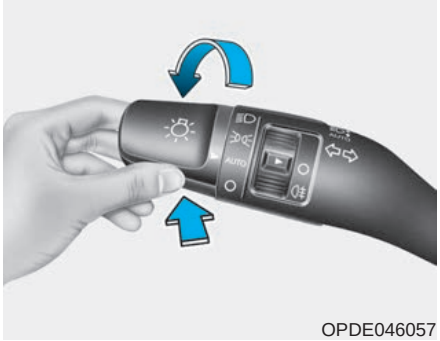
**For more details, refer to "Welcome System" in this chapter.**

### Escort light

When the vehicle is turned OFF and the driver's door is opened, the puddle lamp will come on for 30 seconds. If the driver's door is closed within the 30 seconds, the puddle lamp will turn off after 15 seconds. If the driver's door is closed and locked, the puddle lamp will turn off immediately.

The Puddle Lamp Escort Light will turn on only the first time the driver's door is opened after the vehicle is turned off.

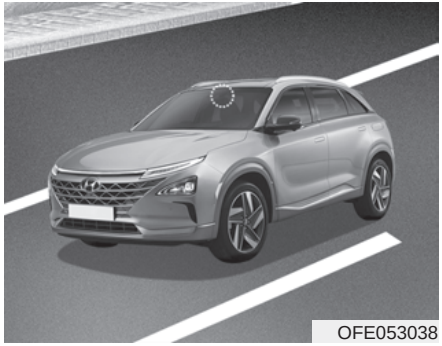
# HIGH BEAM ASSIST (HBA) (IF EQUIPPED)




OPDE046057

Hight Beam Assist will automatically switch between high beam and low beam depending on the detected brightness from the lamps of oncoming vehicles or vehicles in front.

### *Detecting sensor*



OFE053038

[1] : Front view camera

The front view camera is used as a detecting sensor to detect ambient light and brightness while driving.

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

**NOTICE**

- **Always keep the front view camera in good condition to maintain optimal performance of High Beam Assist.**
- **For more information on the precautions of the front view camera, refer to the "Forward Collision-Avoidance Assist (FCA)" section in chapter 7.**

## High Beam Assist settings

With the engine on, select 'Lights → High Beam Assist (or HBA (High Beam Assist))' from the Settings menu to turn on High Beam Assist and deselect to turn off the function.

**⚠ WARNING**

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

## 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.**

## High Beam Assist operation

### *Display and control*

- After selecting High Beam Assist in the Settings menu, High Beam Assist will operate by following the procedure below.
  - Place the headlight switch in the AUTO position and push the headlight lever towards the instrument cluster. The High Beam Assist ( AUTO ) indicator light will illuminate on the instrument cluster and High Beam Assist will be enabled.
  - When High Beam Assist is enabled, high beam will turn on when vehicle speed is above 25 mph (40 km/h). When vehicle speed is below 19 mph (30 km/h), high beam will turn off.
  - The High Beam ( ) indicator light will illuminate on the instrument cluster when high beam is on.
- When High Beam Assist is operating, if the headlight lever or switch is used, High Beam Assist operates as follow:
  - If the headlight lever is pulled towards you when the high beam is off, the high beam will turn on without High Beam Assist cancelled. When you let go of the headlight lever, the switch will move to the middle and the high beam will turn off.
  - If the headlight switch is pulled towards you when the high beam is on by High Beam Assist, low beam will turn on and High Beam Assist will turn off.
  - If the headlight switch is placed from AUTO to another position (headlight/position/off), High Beam Assist will turn off and the corresponding light will turn on.
- When High Beam Assist is operating, high beam switches to low beam if any of the following conditions occur:
  - When the headlight of an oncoming vehicle is detected.
  - When the tail light of a vehicle in front is detected.
  - When the headlight or tail light of a motorcycle or a bicycle is detected.
  - When the surrounding ambient light is bright enough that high beams are not required.
  - When streetlights or other lights are detected.

## High Beam Assist malfunction and limitations

OIG059097L

When High Beam Assist is not working properly, the warning message will appear and ⚠ warning light will illuminate on the instrument cluster. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

### *Limitations of High Beam Assist*

High Beam Assist may not work properly in the following situations:

- Light from an oncoming or front vehicle is not detected because of lamp damage, or because it is hidden from sight, etc.
- Headlight of an oncoming or front vehicle is covered with dust, snow or water.
- A front vehicle's headlights are off but the fog lights are on and etc.
- There is a lamp that has a similar shape as a vehicle's lamp.
- Headlights have been damaged or not repaired properly.
- Headlights are not aimed properly.
- Driving on a narrow-curved road, rough road, uphill or downhill.
- Vehicle in front is partially visible on a crossroad or curved road.
- There is a traffic light, reflecting sign, flashing sign or mirror ahead.
- There is a temporary reflector or flash ahead (construction area).
- The road conditions are bad such as being wet, iced or covered with snow.
- A vehicle suddenly appears from a curve.
- The vehicle is tilted from a flat tire or is being towed.
- Light from an oncoming or front vehicle is not detected due to obstacles in the air such as exhaust fume, smoke, fog, snow, or water spay or blizzard on the road, or fogging in the lamp, etc.

### Information

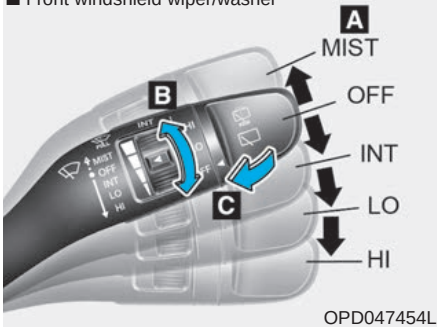
**For more information on the limitations of the front view camera, refer to the "Forward Collision-Avoidance Assist (FCA)" section in chapter 7.**

**⚠ WARNING**

- **At times, High Beam Assist may not work properly. The function is for your convenience only. It is the responsibility of the driver for safe driving practices and always check the road conditions for your safety.**
- **When High Beam Assist does not operate normally, change the headlight position manually between high beam and low beam.**
- **High Beam Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.**

# WIPERS AND WASHERS

■ Front windshield wiper/washer




OPD047454L

■ Rear window wiper/washer

OTLA045318

**A : Wiper speed control**

- MIST – Single wipe
- OFF – Off
- INT – Intermittent wipe
- LO – Low wiper speed
- HI – High wiper speed

**B : Intermittent control wipe time adjustment**

**C : Wash with brief wipes (pull lever towards you)**

**D : Rear wiper/washer control**

- HI – High wiper speed
- LO – Low wiper speed
- OFF – Off

**E : Wash with brief wipes (rear) (push lever away from you)**

## Front Windshield Wipers

Operates as follows when the POWER button is in the ON position.

MIST : For a single wiping cycle, push the lever upward and release. The wipers will operate continuously if the lever is held in this position.

OFF : Wiper is not in operation.

INT : Wiper operates intermittently at the same wiping intervals. To vary the speed setting, move the speed control lever. The top most setting will run the wipers most frequently (for more rain). The bottom setting will run the wipers the least frequently (for less rain).

LO : The wiper runs at a lower speed.

HI : The wiper runs at a higher speed.

### Information

**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.**

### *AUTO - Automatic Wiper Control (if equipped)*

A rain sensor located near the windshield detects moisture accumulation and controls the wiping cycle automatically. This mode is designed to operate the wiper at an appropriate speed depending on the amount of rainfall. The sensitivity can be varied by turning the adjustment control (B) located on the wiper stalk. If the wiper switch is set in AUTO mode when the ignition switch is in the ON position, the wiper will operate once to perform a self-check of the system. Set the wiper control to the OFF position when the windshield wipers are not required.

### ⚠ WARNING

**To avoid personal injury from the windshield wipers, when the engine is running and the windshield wiper switch is placed in the AUTO mode:**

- **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. The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.**
- **Do not remove the sensor cover. Damage to system parts could occur and may not be covered by your vehicle warranty.**
- **Because of using a photo sensor, temporary malfunction could occur according to sudden ambient light change while driving.**

## Front Windshield Washers

OTLE045164

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 will continue until you release the lever. If the washer does not work, you may need to add washer fluid to the washer fluid reservoir.

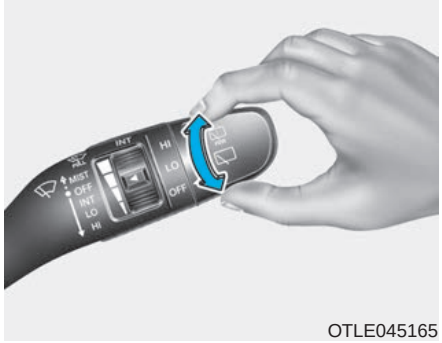
**⚠ WARNING**

**When the outside temperature is below freezing, ALWAYS warm the windshield using the defroster to help prevent the washer fluid from freezing on the windshield and obscuring your vision which could result in an accident and serious injury or death.**

**NOTICE**

- **To prevent possible damage to the washer pump, do not operate the washer when the fluid reservoir is empty.**
- **To prevent possible damage to the wipers or windshield, do not operate the wipers when the windshield is dry.**
- **To prevent damage to the wiper arms and other components, do not attempt to move the wipers manually.**
- **To prevent possible damage to the wipers and washer system, use anti-freezing washer fluids in the winter season or cold weather.**

## Rear Window Wiper and Washer



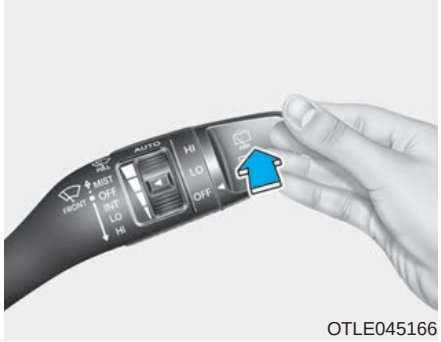
OTLE045165

The rear window wiper and washer switch is located at the end of the wiper and washer switch lever. Turn the switch to the desired position to operate the rear wiper and washer.

HI – High wiper speed

LO – Low wiper speed

OFF – Off



OTLE045166

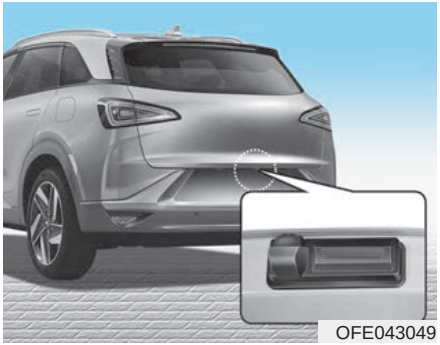
Push the lever away from you to spray rear washer fluid and to run the rear wipers 1~3 cycles. The spray and wiper operation will continue until you release the lever.

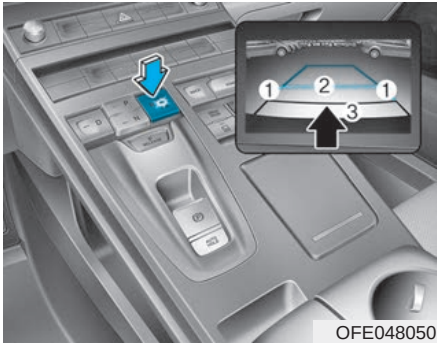
### *Auto rear wiper*

The rear wiper will operate while the vehicle is in reverse with the front wiper ON by selecting the function on the Infotainment system screen.

Go to 'Vehicle Settings → Convenience → Auto Rear Wiper (in R)'.

## REAR VIEW MONITOR (RVM) (IF EQUIPPED)


OFE043049



OFE048050

(1) Vehicle width
(2) 100 cm from the rea bumper
(3) 50 cm from the rear bumper

Rear View Monitor will activate when the vehicle is in the ready ( ) mode and the gear is in the R (Reverse) position.

This is a supplemental function that shows behind the vehicle through the infotainment system display while backing-up.

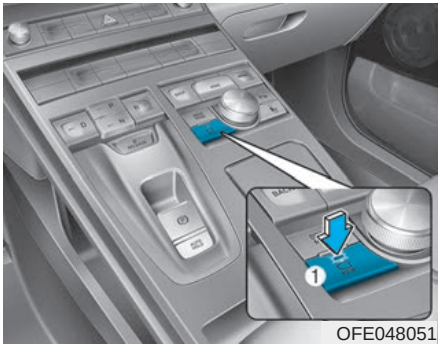
**⚠ WARNING**

**Rear View Monitor is not a safety device. It only serves to assist the driver in identifying objects directly behind the middle of the vehicle. The camera does NOT cover the complete area behind the vehicle.**

**⚠ WARNING**

- **Never rely solely on the rear camera display when backing-up.**
- **ALWAYS look around your vehicle to make sure there are no objects or obstacles before moving the vehicle in any direction to prevent a collision.**
- **Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.**

# SURROUND VIEW MONITOR (SVM) (IF EQUIPPED)



OFE048051

Surround View Monitor can assist in parking by allowing the driver to see around the vehicle. Push the button (1, indicator ON) to operate the function. To cancel the function, push the button again (1, indicator OFF).

### *Operating conditions*

- When the Parking/View button is pressed
- When the gear is in D, N or R
- When vehicle speed is under 9 mph (15 km/h)

### Information

- **When vehicle speed is over 9 mph (15 km/h), Surround View Monitor will turn off. The function will not automatically turn on again, even though vehicle speed gets below 9 mph (15 km/h). Push the button (1, indicator ON) again, to turn on the function.**
- **When the vehicle is backing up, the function will turn ON regardless of vehicle speed or button state. However, if vehicle speed is over 9 mph (15 km/h) when driving forward, Surround View Monitor will turn off.**
- **A warning appears on the function when:**
  - **The liftgate is opened**
  - **The driver's door is opened**
  - **The passenger's door is opened**
  - **The outside rearview mirror is folded**
- **If Surround View Monitor is not operating normally, have the vehicle take to an authorized HYUNDAI dealer and have the function checked.**

**For more details, refer to the separately supplied manual with your vehicle.**

### CAUTION

ODH047435

**(1) Wide-front view camera**
**(2) Wide-side view camera**
**(3) Wide-rear view camera**

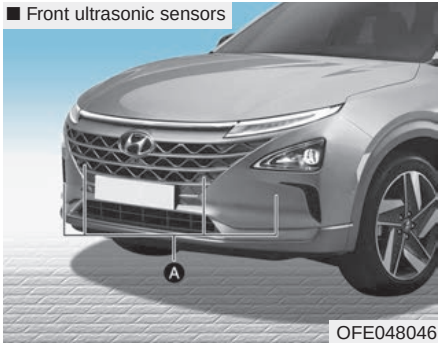
**Surround View Monitor only serves to assist the driver in parking. ALWAYS look around your vehicle to make sure there are no objects or obstacles before moving the vehicle.**

### NOTICE

**Always keep the camera lens clean. The camera may not work normally if the lens is covered with foreign material. However, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone etc.). This may damage the camera lens.**

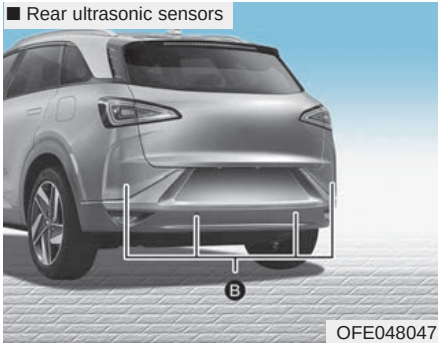
# FORWARD/REVERSE PARKING DISTANCE WARNING (PDW) (IF EQUIPPED)

■ Front ultrasonic sensors




OFE048046

■ Rear ultrasonic sensors




OFE048047

[A]: Front ultrasonic sensors,
[B]: Rear ultrasonic sensors

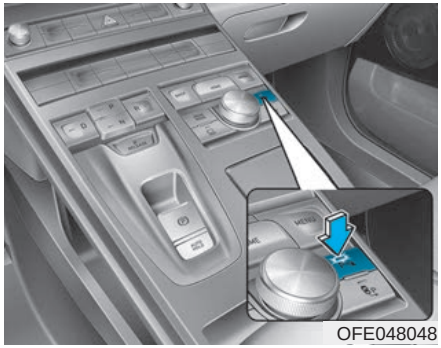
Forward/Reverse Parking Distance Warning assists the driver during movement of the vehicle by warning sound if any object is sensed within the distance of 30 in. (100 cm) in front and 47 in. (120 cm) behind the vehicle.

Forward/Reverse Parking Distance Warning is a supplemental function that senses objects within the range and location of the sensors, it cannot detect objects in other areas where sensors are not installed.

**⚠ WARNING**

- **ALWAYS look around your vehicle to make sure there are no objects or obstacles before moving the vehicle in any direction to prevent a collision.**
- **Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.**
- **Be aware that some objects may not be visible on the screen or be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.**

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



OFE048048

### Operating condition

- Forward/Reverse Parking Distance Warning will activate when parking safety button is pressed with the POWER button in the ON position.
- Parking safety button turns on automatically and activates Forward/Reverse Parking Distance Warning when the gear is in the R (Reverse) position.

- However, if vehicle speed exceeds 6 mph (10 km/h), the function will not warn you even though objects are detected.

  And if vehicle speed exceeds 12 mph (20 km/h, without RSPA) or 18 mph (30 km/h, with RSPA), the function will turn off automatically.

* RSPA : Remote Smart Parking Assist

- To turn on the function, press parking safety button.
- When more than two objects are sensed at the same time, the closest one will be recognized first.

### Types of warning sound and indicator

| Distance from object | | Warning indicator | | Warning sound |
|---|---|---|---|---|
| | | When driving forward | When driving rearward | |
| 24 in. - 39 in. (60 cm - 100 cm) | Front | | - | Buzzer beeps intermittently |
| 24 in. - 47 in. (60 cm - 120 cm) | Rear | - | | Buzzer beeps intermittently |
| 12 in. - 24 in. (30 cm - 60 cm) | Front | | | Buzzer beeps frequently |
| | Rear | - | | Buzzer beeps frequently |
| under 12 in. (under 30 cm) | Front | | | Buzzer sounds continuously |
| | Rear | - | | Buzzer sounds continuously |

**NOTICE**

- **The indicator may differ from the illustration depending on objects or sensors state. If the indicator blinks, have the function checked by an authorized HYUNDAI dealer.**
- **If the audible warning does not sound or if the buzzer sounds intermittently when shifting into R (Reverse) position, this may indicate a malfunction with the Forward/Reverse Parking Distance Warning. If this occurs, have the vehicle checked by an authorized HYUNDAI dealer as soon as possible.**

### *Non-operational conditions of Forward/Reverse Parking Distance Warning*

**Forward/Reverse Parking Distance Warning may not operate normally when:**

- Moisture is frozen to the sensor.
- Sensor is covered with foreign matter, such as snow or water, or the sensor cover is blocked.

**There is a possibility of Forward/Reverse Parking Distance Warning malfunction when:**

- Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
- Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
- Heavy rain or water spray is present.
- Wireless transmitters or mobile phones are present near the sensor.
- The sensor is covered with snow.
- Any non-factory equipment or accessories have been installed, or if the vehicle bumper height or sensor installation has been modified.

**Detecting range may decrease when:**

- Outside air temperature is extremely hot or cold.
- Sensor is covered with foreign matter, such as snow or water
- Undetectable objects smaller than 100 cm (39.4 in.) and narrower than 14 cm (5.5 in.) in diameter.

**The following objects may not be recognized by the sensor:**

- Sharp or slim objects such as ropes, chains or small poles.
- Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

**⚠ WARNING**

**Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants related to a Forward/Reverse Parking Distance Warning.**

**Always drive safely and cautiously.**

### *Forward/Reverse Parking Distance Warning precautions*

- Forward/Reverse Parking Distance Warning may not sound consistently depending on the speed and shapes of the objects detected.
- Forward/Reverse Parking Distance Warning may malfunction if the vehicle bumper height or sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- The sensor may not recognize objects less than 30 cm (11 in.) from the sensor, or it may sense an incorrect distance. Use caution.
- When the sensor is frozen or stained with snow, dirt, or water, the sensor may be inoperative until the stains are removed using a soft cloth.
- Do not push, scratch or strike the sensor. Sensor damage could occur.
- Do not spray the sensors or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.

# REMOTE SMART PARKING ASSIST (RSPA) (IF EQUIPPED)

Remote Smart Parking Assist helps drivers park their vehicle by using sensors to detect parking spaces, control the steering wheel, shift the gear and adjust vehicle speed automatically with instructions through sound and infotainment system screen.

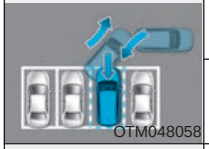
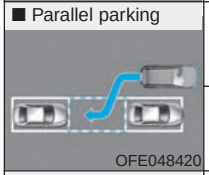
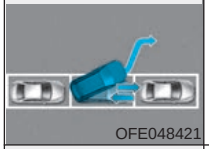
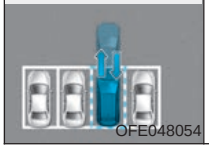
### Applicable Remote Smart Parking Assist modes :

- Remote Parking/Smart Parking provides assist for reverse parking (perpendicular parking) and parallel parking.
- Smart Exit provides assist for forward parallel exit only.
- Remote Moving Forward/Backward provides assist for forward/backward movement in the parking space with driver outside the vehicle.

Remote Smart Parking Assist does not work if there is no car parked in front of the parking space you are planning to park or if it is a diagonal parking space.

After parking your vehicle using Remote Smart Parking Assist, the vehicle may not be parked at the exact spot you have wished.

To prevent frequency interference, the heater and air conditioner may be turned off when Remote Smart Parking Assist is activated.

| Assist provided | Relevant function |
|---|---|
| ■ Reverse parking  OTM048058 | Smart Parking |
| | Remote Parking |
| ■ Parallel parking  OFE048420 | Smart Parking |
| | Remote Parking |
| ■ Parallel exit  OFE048421 | Smart Exit |
| ■ Forward/Backward  OFE048054 | Remote Moving Forward/ Backward |

| | |
|---|---|
| P | Parking Assist button |
| P | Parking Safety button |

Deactivate the function and park/exit your vehicle manually, when the situation requires parking manually.

Forward/Reverse Parking Distance Warning sound and Surround View Monitor activate while Remote Smart Parking Assist is activated.

The Remote Smart Parking Assist will be canceled if Parking Distance Warning is cancelled by pressing the button to the OFF position.

For operation of Parking Distance Warning and Surround View Monitor, refer to the relevant description in this manual.

**⚠ WARNING**

- **Remote Smart Parking Assist should only be considered as a supplementary function. The driver must check the front and rear view for objects. The operational function of Remote Smart Parking Assist can be affected by many factors and conditions of the surroundings, so the responsibility rests always with the driver.**
- **Remote Smart Parking Assist may not operate normally if the vehicle needs wheel alignment adjustment. Have the vehicle checked by an authorized HYUNDAI dealer.**
- **If you use a different tire or wheel size rather than the size recommended by the HYUNDAI dealer, Remote Smart Parking Assist may not work properly. Always use the same size tire and wheel.**

**⚠ WARNING**

- **Do not use Remote Smart Parking Assist when in drunken state.**
- **Remote Smart Parking Assist may not operate properly depending on the surrounding environment and other conditions.**
- **Remote Smart Parking Assist may not recognize the object too close to the vehicle.**
- **When operating Remote Smart Parking Assist, be careful of the objects located above or below the sensor position. Such object may damage the vehicle or other objects.**
- **Do not let children or other person to use the smart key.**

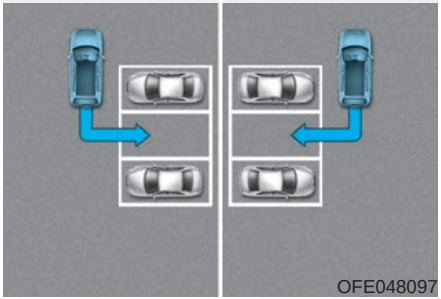
## Operating condition

Use Remote Smart Parking Assist when all the below conditions are met.

- When the parking space is a straight line
- When there is a parked vehicle next to the space where you want to park
- When there is enough space to move the vehicle
- When you choose “Confirm” on infotainment system booting.

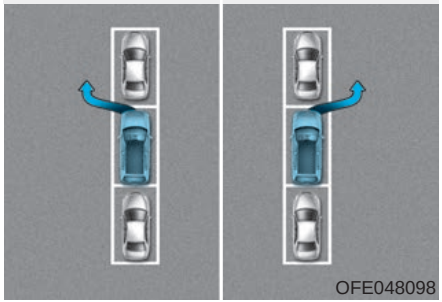
■ Right side
- Reverse parking

■ Left side
- Reverse parking



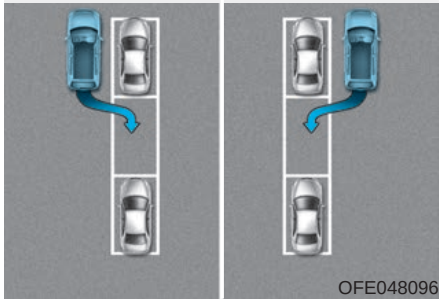

■ Left side
- Parallel exit

■ Right side
- Parallel exit

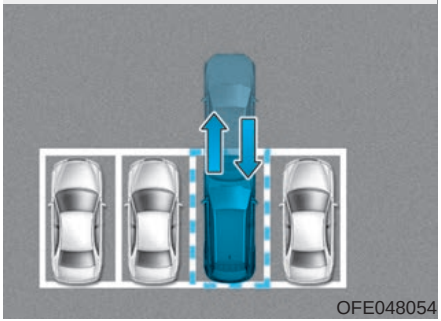



■ Right side
- Parallel parking

■ Left side
- Parallel parking




■ Remote moving forward/backward




## Non-operating condition

In the following conditions, Remote Smart Parking Assist may not operate properly or be cancelled. Drive the vehicle manually in the below conditions.

- Curved parking space
- Inclined roads
- A vehicle loaded with longer or wider cargo compared to the vehicle
- Diagonal parking space
- Heavy snow or rain
- Near a circular pillar or narrow pillar, or a pillar surrounded by objects such as fire extinguisher, etc.
- The sensor is positioned incorrectly by an impact to the bumper
- Bumpy roads
- A vehicle equipped with a snow chain or spare tire
- Tire pressure lower or higher than the standard tire pressure
- A trailer connected to the vehicle
- Slippery or uneven road

- Big vehicles such as buses or trucks parked
- Sensor covered with foreign matter, such as snow or water
- An obstacle such as a trash can, bicycle, shopping cart, etc. is near
- Heavy wind
- Wheel changed to an unauthorized size
- A problem with the wheel alignment
- Vehicle leaned severely to one side
- Front or rear ultrasonic sensors are malfunction or not working properly. (Refer to the Parking Distance Warning in chapter 3.)
- Low level of the smart key that requires battery replacement

## Limitations of Remote Smart Parking Assist

- When the vehicle has been parked/stopped for a long time in a cold environment, the Remote Moving Forward/Backward may be delayed depending on the engine condition when the vehicle is turned on remotely.
- Remote Smart Parking Assist may suddenly apply brake to avoid collision against stationary or moving object.
- Remote Smart Parking Assist may be cancelled unexpectedly when a person or animal passes by near the vehicle.
- The performance of Remote Smart Parking Assist may be degraded and frequently stop when driving in strong electric field area.
- Right after the parking place search complete and beep sound is generated, the search complete may be cancelled according to the surrounding environment
- Even while Remote Smart Parking Assist is in activation, the vehicle may collide with the object existing within the blind-spot area of the sensor.
- When there is any obstacle within the blind-spot area, drive out of the parking space manually.
- Remote Smart Parking Assist may not recognize the object that appears suddenly.
- Remote Smart Parking Assist does not work if there is no car parked in front of the parking space you are planning to park.

**⚠ WARNING**

**Do not use Remote Smart Parking Assist in the following conditions for unexpected results may occur and cause a serious accident.**

**1. Parking on inclines**

**Park and exit manually when you park on inclines.**

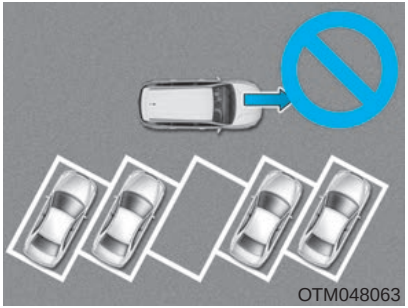
**2. Parking in snow**

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

**3. Parking in narrow space**

**The Remote Smart Parking Assist may not search for parking spaces if the space is too narrow. Even if the Remote Smart Parking Assist is operating, always be careful.**

**4. Parking diagonal**




**The Remote Smart Parking Assist is not a supplemental for diagonal parking. Even if the vehicle is able to enter the space, do not operate the Remote Smart Parking Assist.**

**5. Parking in uneven road**

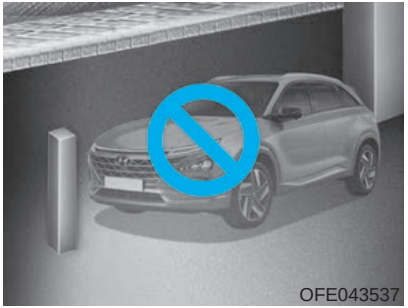
**The Remote Smart Parking Assist may cancel when the vehicle slips or the vehicle couldn't move due to road condition.**

**6. Parking behind a truck**

**An accident may occur when parking behind a vehicle higher than yours. For example, bus, truck, etc.**

**Do not solely rely on the Parking Assist function.**

**7. Obstacle in parking space**

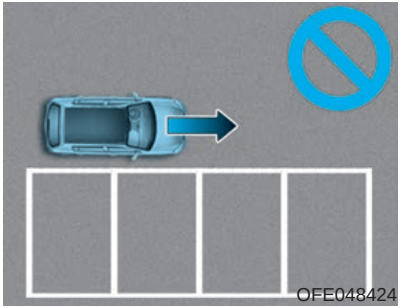



**When detecting for a parking space next to pillar or structures around pillar (fire hydrants, etc.), the parking performance may be degraded.**

**8. Using a Smart Exit in wall proximity conditions**

**When using a Smart Exit in narrow and near a wall, the Remote Smart Parking Assist may not work properly.**

**9. Parking in an empty parking place**




**The Remote Smart Parking Assist does not work if there is no car parked in front of the parking space you are planning to park. Park the vehicle manually.**

## How Smart Parking function works

Smart Parking is available with the driver on board. Make sure the conditions available before activating the Smart Parking function.

1. Select Smart Parking function:

   Press the Parking Assist button with the shift lever placed in D (Drive) or N (Neutral) position.

   ❊ However, the Smart Exit is selected if you press the Parking Assist button when the gear is in N (Neutral) position after the initial startup.
2. Search for parking space: Slowly move forward below 12 mph (20 km/h).
3. Search complete: Automatic search by sensor.

   However, check the actual parking environment before parking the vehicle.
4. Select parking type: Reverse (left/right), parallel (left/right)
5. Operating instructions: Smart Parking/Remote Smart Parking

**⚠ CAUTION**

- **Always check for obstacles around your vehicle before driving.**
- **The function may be cancelled if you attach something (cover, etc.) to the steering wheel.**

6. Smart Parking assist: Steering wheel, gear shift and vehicle speed control (reverse parking).
7. Parking complete: Smart Parking complete after reaching the parking position

❊ After the parking is complete, arrange the vehicle position manually, if necessary.

❊ You can use Smart Parking function when the infotainment system screen operate normally.

### *1. Selecting Parking mode*

OFE043414N

| | |
|---|---|
| P | Parking Assist button |
| P | Parking Safety button |

- Press the Parking Assist button and the button indicator will illuminate.
- The Parking Safety button will illuminate and the infotainment system screen will display the instruction screen.

  A warning sound will be heard if an obstacle is detected.

- To deactivate Smart Parking function:

1. Press the Parking Assist button again (until the "Selecting parking mode" stage).
2. Shift the gear to R (Reverse) position before the operation of the Smart Parking assist.
3. Press the 'Cancel' button on the infotainment system screen while the Smart Parking is in activation.
4. Press the Parking Safety button while the Smart Parking is in activation.

### *2. Searching for parking space*

OFE048134L

- Slowly drive forward maintaining the distance of approximately 20 ~ 60 in. (0.5 ~ 1.5 m) with the parked vehicles.
- If the vehicle speed is over 12 mph (20 km/h), a message will appear to notify you to reduce the speed.
- To deactivate the parking function, press the Parking Assist button, the 'Cancel' button on the screen or the Parking Safety button.

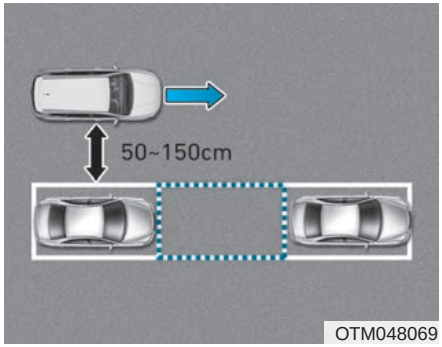
❊ The parking performance may be degraded if a regular distance from the parked vehicle is not maintained.

- If the vehicle speed is over 18 mph (30 km/h), the function will be cancelled.
- The search for a parking space will be completed only when there is enough space for the vehicle to move to park.

**⚠ CAUTION**

- When searching for a parking space, Smart Parking may not be able to find a parking space if there is no vehicle parked, a parking space is available after driving by or a parking space is available before driving by.
- Smart Parking may not operate normally in the following conditions:
  (1) When the sensors are frozen
  (2) When the sensors are dirty
  (3) When it snows or rains heavily
  (4) When a pillar or object is near
  (5) Parked vehicle is abnormally parked

In above cases, Smart Parking may not search the parking space although the parking space exists. And Smart Parking may search the parking space although the parking space is not proper to park.



OTM048069

**⚠ CAUTION**

Slowly drive forward maintaining the distance of approximately 40 in. (100 cm) with the parked vehicles. If the distance is below 20 in. (50 cm) or over 59 in. (150 cm), Smart Parking may not be able to search for a parking space.

**⚠ CAUTION**

After searching for a parking space is completed, continue using Smart Parking after checking the surrounding area.

Especially, check the distance of the outside rearview mirror and objects while using Smart Parking to prevent careless accidents.

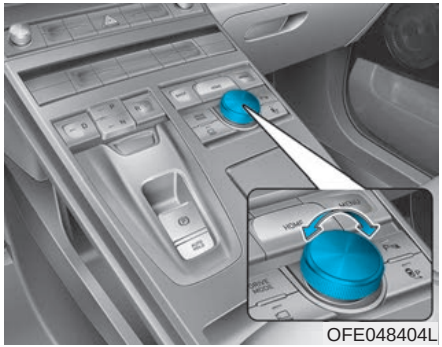
### *3. Search complete*

OFE048135L

- If the search is complete, the above message will appear with a ding-dong sound.
- The search complete sound is generated every time a parking space is searched. Icons indicating the selectable parking type and direction are activated on the screen.
- To deactivate parking function, press the Parking Assist button, the 'Cancel' button on the screen or Parking Safety button.
- Keep driving forward to go back to the previous stage for searching the parking space.

### *4. Selecting Parking function type*

OFE048136L

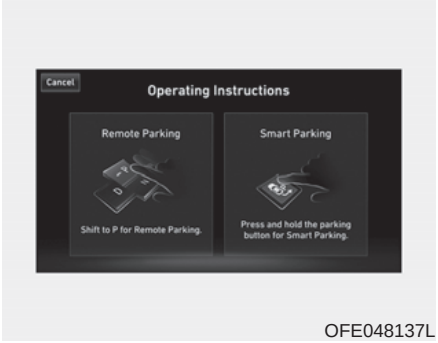


OFE048404L

- With the vehicle stopped, select the icon for the desired parking type. To select the parking type, touch the infotainment system screen or operate the DIS central controller to select and press the icon.
- To deactivate the parking function, press the Parking Assist button or the 'Cancel' on the screen or the Parking Safety button.
- Keep driving forward to go back to the previous stage for searching the parking space.

❈ If the Smart Parking is deactivated when the driver presses the Parking Assist button by mistake before selecting the parking type, press the Parking Assist button while the vehicle is stopped to return to the stage for selecting the parking type.

### *5. Operating instructions*




OFE048137L

- After selecting the parking type, the driver can select the operation mode between the Smart Parking and Remote Parking. Follow the instruction on the screen and press and hold the Parking Assist button to select the Smart Parking. To select the Remote Parking put the shift gear in P (Park) position and follow the instruction.
- To deactivate the parking assist function, press the ‘Cancel’ button on the screen or the Parking Safety button.

❈ To see the instruction for the Remote Parking, refer to the relevant part of the manual.

❈ Depress the brake pedal when selecting the operation mode. The function will be deactivated when the vehicle moves.

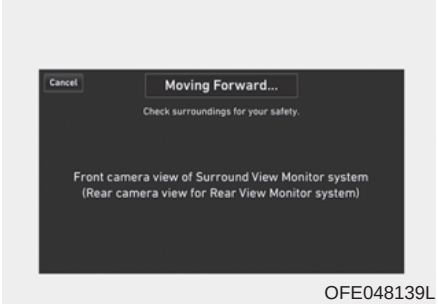
OFE048138L

❈ If the Remote Parking is unavailable, the message is shown on the screen when selecting the parking type.

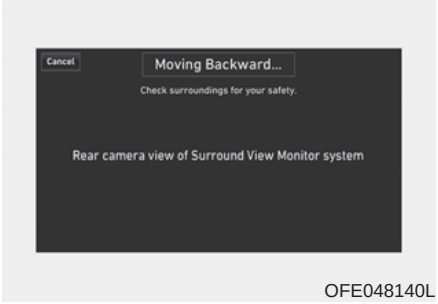
**⚠ WARNING**

**Always be careful while parking for other vehicles or pedestrians.**

### *6. Smart Parking function assist*




OFE048139L




OFE048140L

- With the vehicle stopped, press and hold the Parking Assist button and then the steering wheel, gear shift and vehicle speed are controlled automatically.
- The parking function will not operate if the door is open or the driver's seatbelt is unfastened.
- If the driver releases the Parking Assist button while the Smart Parking is in activation, the assist will stop temporarily.

❊ The infotainment system screen will display the rear camera view even when the vehicle is moving forward. (if equipped with the Rear View Camera)

❊ Depress the brake pedal to control the vehicle speed. The accelerator pedal will not activate. The function will be cancelled when the vehicle speed exceeds 3 mph (5 km/h).

### *7. Smart Parking function complete*

OFE048141L

Complete parking your vehicle according to the instructions on the infotainment system screen. If required, manually control the steering wheel and complete parking your vehicle.

When the parking is complete:

- The gear P (Park) and Electronic Parking Brake (EPB) are engaged automatically.
- Release the Parking Assist button.

❈ Depending on the parking environment, it may be completed by bumping against the stopper.

**⚠ CAUTION**

**If the Parking Distance Warning warning sound (distance from object is within 30 cm: continuous beep) occurs, check the surrounding.**

### To cancel the Smart Parking while in operation

(1) Press the Parking Assist button before selecting the operation mode.

(2) Shift the gear to to R (Reverse) position before the operation of the “Smart Parking” stage.

(3) Press the Parking Safety button or the ‘Cancel’ button on the infotainment system screen.

(4) Driver controls the vehicle during the Smart Parking

When the driver shifts the gear after depressing the brake pedal to stop the vehicle, the gear shifts and the Smart Parking is deactivated. In this case, the Electronic Parking Brake (EPB) is not engaged.

### The Smart Parking function will stop temporarily when:

(1) An obstacle at the direction the vehicle is heading is detected.

(2) The door or liftgate is open.

(3) The driver’s seatbelt is unfastened.

(4) Rear Cross-Traffic Collision-Avoidance Assist is activated while reversing.

(5) The driver releases the Parking Assist button.

(6) The drivers stops the vehicle by depressing the brake pedal.

❈ The vehicle stops when the Smart Parking will stop temporarily and the Smart Parking will resume when the above condition is cleared.

**The Smart Parking function is cancelled while in operation when:**

(1) The driver holds the steering wheel while the steering wheel is controlled

(2) The gear is shifted or the Electronic Parking Brake (EPB) is activated

(3) The hood opens

(4) The vehicle speed exceeds 3 mph (5 km/h)

(5) The vehicle accelerates suddenly

(6) The vehicle slips back while the vehicle speed is controlled

(7) The wheel is stuck and the vehicle is unable to move

(8) The obstacles are at the front and back of the vehicle at the same time

(9) About 3 minutes and 50 seconds have passed after the Smart Parking assist is activated

(10) The door opens while the driver's seatbelt is unfastened

(11) The gradient of the road exceeds the range supported by the Smart Parking function

(12) The control of steering, shifting gear, braking and driving assist are impossible

(13) The function is paused for more than one minute

(14) The driver continuously presses and releases the Parking Assist button over 10 times

(15) The vehicle is unable to enter the parking space while the Smart Parking function is in activation

(16) The Traction Control System (TCS) is activated while the vehicle speed is controlled

❊ When the Smart Parking function is cancelled, gear P (Park) and Electronic Parking Brake (EPB) are engaged automatically.

## How the remote parking function works

Remote Parking is available with the driver outside the vehicle. Make sure the conditions available before activation the Remote Parking function.

1. Select Remote Parking:

   Press the Parking Assist button with the shift lever placed in D (Drive) or N (Neutral) position.

   However, the Smart Exit is selected if you press the Parking Assist button when the vehicle is in N (Neutral) position after the initial startup.

2. Search for parking space: Slowly move forward below 15 mph (20 km/h).

3. Search complete: Automatic search by sensor.

   However, check the actual parking environment before parking the vehicle.

4. Select parking type: Reverse (left/right), parallel (left/right)

5. Operating instructions: Smart Parking/Remote Parking

6. Remote Parking function: Parking assist through controlling the steering wheel, gear shift and vehicle speed

7. Remote Parking function is completed.

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❊ You can use Smart Parking after display on infotainment system (You cannot use Smart Parking if you don't choose "Confirm" on infotainment system booting)

| | |
|---|---|
| P | Parking Assist button |
| P | Parking Safety button |
| HOLD | Remote start button |
| | Moving forward button |
| | Moving backward button |

### *6. Remote Parking function*

OFE048142L

Put the shift gear in P (Park) position. Exit the vehicle possessing the smart key and check whether all the doors are closed. The Remote Smart Parking assist will operate only if the driver presses the smart key button within about 13 ft. (4 m) from the vehicle. Press and hold the moving forward or backward button on the smart key and then the steering wheel, gear shift and vehicle speed are controlled automatically.

- If the driver releases the button the vehicle will stop and the assist will stop temporarily. Press and hold the button again to resume the operation.

❊ Press the moving forward or backward button again after checking the distance (within about 9 ~ 16 ft. (3 ~ 5 m)) from the vehicles if the vehicle didn't move after pressing and holding the smart key button for about 5 seconds.

### *7. Remote Parking function complete*

When the parking is complete, the message is displayed on the infotainment system screen and the vehicle is automatically turned off. Drivers always should check whether the door, window and sunroof are closed and the door is locked.

- When parking is complete:

- The gear P (Park) and Electronic Parking Brake (EPB) are engaged automatically.

❊ Release the moving forward/backward button on the smart key.

❊ The parking may complete bumping on the stopper.

**⚠ CAUTION**

- **Always check for obstacles around your vehicle before driving.**
- **The function may be cancelled if you attach something (cover, etc.) to the steering wheel.**
- **Make sure all the passengers exit the vehicle when the Remote Parking function is assisted.**
- **Make sure all the smart keys are outside the vehicle.**
- **The smart key detection range from the vehicle may vary depending on the surrounding environment (indoor/outdoor, strong electric field area).**
- **The smart key detection range may change as the vehicle moves. Maintain an appropriate distance from the vehicle.**

**To cancel the Remote Parking while in operation**

(1) Press the Parking Assist button at the "Searching for parking space" stage or the "Selecting parking type" stage.

(2) Shift the gear to R (Reverse) position before the operation of the Remote Smart Parking Assist.

(3) Press the Parking Safety button or the 'Cancel' button on the info-tainment system screen.

(4) Driver controls the vehicle during Remote Smart Parking Assist.

- The Remote Parking function is immediately cancelled and the vehicle turns off when the remote start button on the smart key is pressed.
- The function is cancelled but the vehicle stays on when the driver enters the vehicle with the smart key and all the doors are closed or the driver depresses the brake pedal.

**The Remote Parking function will stop temporarily when:**

(1) An obstacle at the direction the vehicle is heading is detected.

(2) The door or liftgate is open.

(3) The moving forward/backward button on the smart key is released.

(4) Multiple buttons on the smart key are pressed at the same time.

(5) The distance between the smart key and vehicle is over 13 ft. (4 m).

(6) A button on the other smart key is pressed.

(7) Rear Cross-Traffic Collision-Avoidance Assist is activated while reversing.

❊ The vehicle stops when the Remote Parking function will stop temporarily and the Remote Parking function will resume when the above condition is cleared.

**The Remote Parking function is cancelled while in operation when:**

(1) The driver holds the steering wheel while the steering wheel is controlled

(2) The gear is shifted or the Electronic Parking Brake (EPB) is activated

(3) The hood opens

(4) The vehicle speed exceeds 3 mph (5 km/h)

(5) The vehicle accelerates suddenly

(6) The vehicle slips back while con-trolling the vehicle speed

(7) The wheel is stuck and the vehicle is unable to move

(8) Obstacles are at the front and back of the vehicle at the same time

(9) About 3 minutes and 50 seconds have passed after the Remote Smart Parking Assist

(10) The gradient of the road exceeds the range supported by Remote Smart Parking Assist

(11) The steering, shifting gear and drive assist are impossible

(12) The suspended state lasts for over 1 minute

(13) The driver continuously presses and releases the smart key's moving forward/backward button over 10 times

(14) The vehicle is unable to enter the parking space

(15) The Traction Control System (TCS) is activated while controlling the vehicle speed

(16) The smart key has failure

(17) The accelerator/brake pedal is depressed while all the doors are closed

(18) The brake pedal is depressed while the driver's door is open and the smart key is outside the vehicle

(19) The theft alarm system is activated

- When the Remote Parking function is cancelled, gear P (Park) and Electronic Parking Brake (EPB) are engaged automatically. After engaged, the vehicle is automatically turned off.

## How the Smart Exit function works

Smart Exit function is available with the driver on board. Make sure the conditions available before activation the Smart Parking function.

1. Select Smart Exit:

   Press the Parking Assist button with the shift lever placed in P (Park) or N (Neutral) position without driving the vehicle after the initial startup.

   *N (Neutral): Press the Parking Assist button after starting the vehicle and without driving the vehicle. The Smart Exit function is selected. Then the Parking mode is automatically selected after driving.

   *P (Park): After driving the vehicle press the Parking Assist button and Remote Moving Forward/Backward is automatically selected.

2. Search for smart exit space: Automatic searching by sensor at stop

   However, check the actual environment before using Smart Exit function.

3. Select Smart Exit direction: Parallel (left/right)

4. Smart Exit assist: Steering wheel, gear shift and vehicle speed control (parallel exit)

5. Smart Exit function complete

**⚠ WARNING**

**Always be careful while exiting for other vehicles or pedestrians.**

After the Smart Exit function is complete, make sure to check the surrounding road conditions.

However, the Smart Exit function is activated when below conditions are met:

- The vehicle speed is kept under 3 mph (5 km/h) after the vehicle is turned on.
- The parallel parking by the Remote Parking function is complete.

❊ You can use Smart Parking after display on infotainment system (You cannot use Smart Parking if you don't choose "Confirm" on infotainment system booting)

| | |
|---|---|
| P | Parking Assist button |
| P | Parking Safety button |

**⚠ CAUTION**

- **Always check for obstacles around your vehicle before driving.**
- **The function may be cancelled if you attach something (cover, etc.) to the steering wheel.**

### *1. Selecting Smart Exit function*

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- Press the Parking Assist button and the button indicator will illuminate.
- The Parking Safety button will illuminate and the infotainment system screen will display the instruction screen.

  A warning sound will be heard if an obstacle is detected.

- To deactivate the function:

1. Press the Parking Assist button again (until the "Selecting for smart exit direction" stage).
2. Shift the gear to R (Reverse) position before the operation of the Smart Exit assist.
3. Press the 'Cancel' button on the infotainment system screen while the Smart Exit is in activation.
4. Press the Parking Safety button while the Smart Exit function is in activation.

### *2. Searching for Smart Exit space*

OFE048143L

- With vehicle stopped, the ultrasonic sensors detect the distance from/to the objects in front/back of the vehicle to search for an exit space.
- Also, the sensors at the vehicle side-front checks for the obstacle in the direction of exit.
- To deactivate the exit function, press the Parking Assist button, the 'Cancel' button on the screen or the Parking Safety button.

❊ The function searches for the exit space again when the function enters the Smart Exit function by pressing the Parking Assist button after the deactivation.

❊ The function still searches for the exit space when the gear is shifted to the other positions than R (Reverse). However, the function will be deactivated when the vehicle moves.

**⚠ CAUTION**

- **When checking surroundings, if the front or rear vehicle (or object) is too near, the function may not work properly.**
- **The function may not operate normally in the following conditions:**
  - **(1) When the sensors are frozen**
  - **(2) When the sensors are dirty**
  - **(3) When it snows or rains heavily**
  - **(4) When a pillar or object is near**
  - **(5) Parked vehicle is abnormally parked**

  **In above cases, the function may not search the exit space although the exit space exists. And the function may search the exit space although the exit space is not proper to Smart Exit function.**
- **When exiting the parking space if an obstacle is detected that may cause an accident, the function may cancel. However, objects in the blind spot may not be recognized. Be sure to check it before using function.**
- **If the space is too small to exit, the function may cancel.**

**⚠ CAUTION**

- **If searching surroundings is completed, continue using the function after checking the surrounding area.**
- **The Smart Exit function may be activated unintentionally, when the shift lever is in P (Park) or N (Neutral) and the Parking Assist button is pressed.**

### *3. Selecting Smart Exit direction*

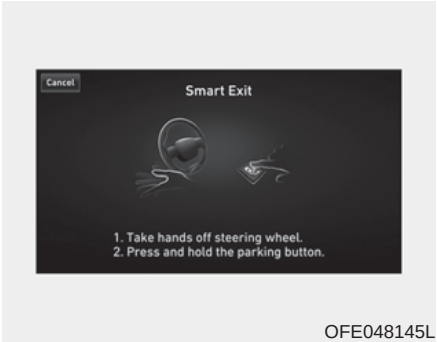
OFE048144L

- With the vehicle stopped, select the icon of the direction you wish to exit. To select the exit direction, touch the infotainment system screen or operate the DIS central controller to select and press the icon.
- To deactivate the exit function, press the Parking Assist button, the ‘Cancel’ button on the screen or the Parking Safety button.

❈ The function searches for the exit space again when the function enters the Smart Exit function by pressing the Parking Assist button after the deactivation.

❈ The function still searches for the exit space when the gear is shifted to the other positions than R (Reverse). However, the function will be deactivated when the vehicle moves.

### *4. Smart Exit function instructions*

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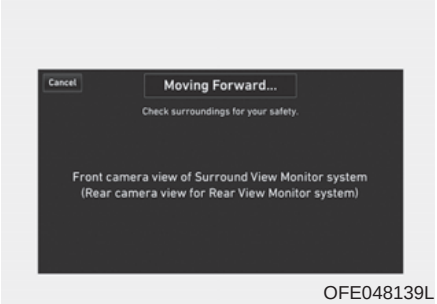
- Follow the instructions on the screen and press and hold the Parking Assist button to select the Smart Exit.
- To deactivate the Smart Exit function, press the 'Cancel' button on the screen or the Parking Safety button.

❈ The function still searches for the exit space when the gear is shifted to the other positions than R (Reverse). However, the function will be deactivated when the vehicle moves.

**⚠ CAUTION**

- **Always check the surrounding before driving your vehicle if the Parking Distance Warning sound (distance from object is within 30 cm: continuous beep) is heard for the object is close to your vehicle.**
- **The function may be cancelled if you attach something (cover, etc.) to the steering wheel.**
- **The function can be cancelled for safety reasons if the vehicle is parked at a small space near a wall.**

### *5. Smart Exit function*

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OFE048140L

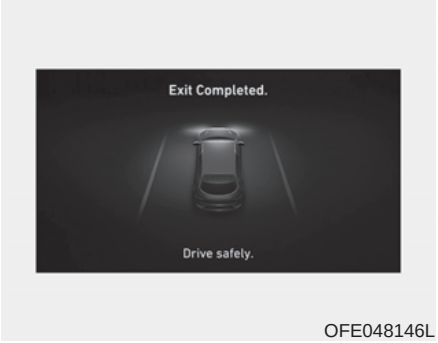
- With the vehicle stopped, press and hold the Parking Assist button and then the steering wheel, gear shift and vehicle speed are controlled automatically.

- The exit function will not operate if the door is open or the driver's seatbelt is unfastened.
- If the driver releases the Parking Assist button while the Smart Exit function is in activation, the assist will stop temporarily.

❊ The infotainment system screen will display the rear camera view when the vehicle is moving forward (if equipped with the Rear View Camera).

❊ Depress the brake pedal to control the vehicle speed. The accelerator pedal will not activate.

### *6. Smart Exit function complete*

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When the exit is complete, the message is displayed on the infotainment system screen. Turn the steering wheel to the direction of exit as much as possible and exit manually after checking the road condition.

- When exit is complete:
  - The vehicle stays in stopped condition for 4 seconds and waits for the driver' to operate manually (depress brake/accelerator pedal.)
  - If the driver does not operate manually after 4 seconds, the function stays in the stopped condition by applying the safety measure (engage gear P (Park) and Electronic Parking Brake (EPB)).

❊ Release the Parking Assist button after the exit is complete.

❊ If the Smart Exit function has been completed while depressing the accelerator pedal, take your foot off the pedal and depress again for manual operation.

❊ If the Smart Exit function has been completed while depressing the brake pedal, the gear D (Drive) is maintained.

**To cancel the Smart Exit function while in operation**

(1) Press the Parking Assist button at the "Searching for smart exit space" stage or the "Selecting for smart exit direction" stage.

(2) Shift the gear to R (Reverse) position before the operation of the Smart Exit function.

(3) Press the Parking Safety button or the 'Cancel' button on the infotainment system screen.

(4) Driver controls the vehicle during the Smart Exit

The function is deactivated when the driver stops the vehicle by depressing the brake pedal and shifts the gear. In this case, the Electronic Parking Brake (EPB) is not engaged.

**The Smart Exit function will stop temporarily when:**

(1) An obstacle at the direction the vehicle is heading is detected.

(2) The door or liftgate is open.

(3) The driver's seatbelt is unfastened.

(4) Rear Cross-Traffic Collision-Avoidance Assist is activated while reversing.

(5) The driver releases the Parking Assist button.

(6) The driver stops the vehicle by depressing the brake pedal.

❊ The vehicle stops when the Smart Exit function will stop temporarily and the Smart Exit function will resume when the above condition is cleared.

**The Smart Exit function is cancelled while in operation when:**

(1) The driver holds the steering wheel while the steering wheel is controlled

(2) The gear is shifted or the Electronic Parking Brake (EPB) is activated

(3) The hood opens

(4) The vehicle speed exceeds 3 mph (5 km/h)

(5) The vehicle accelerates suddenly

(6) The vehicle slips back while controlling the vehicle speed

(7) The wheel is stuck and the vehicle is unable to move

(8) Obstacles are at the front and back of the vehicle at the same time

(9) About 3 minutes and 50 seconds have passed after the Smart Exit function

(10) The door opens while the driver's seatbelt is unfastened

(11) The gradient of the road exceeds the range supported by Smart Exit function

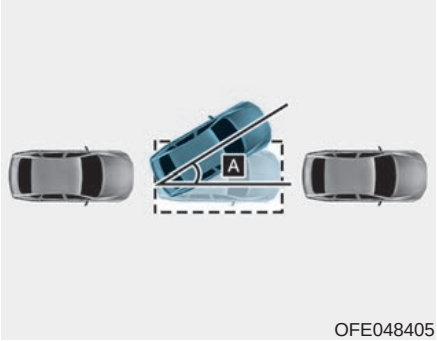
(12) The steering, shifting gear and drive assist are impossible

(13) The suspended state lasts for over 1 minute

(14) The driver continuously presses and releases the Parking Assist button over 10 times

(15) The Traction Control System (TCS) is activated while controlling the vehicle speed

(16) The vehicle's heading degree (A) exceeds a certain amount of degree compare to the degree at the point when the Smart Exit function started



OFE048405

❊ When the Smart Exit function is cancelled, gear P (Park) and Electronic Parking Brake (EPB) are engaged automatically.

## How the Remote Moving Forward/Backward function works

Remote Moving Forward/Backward function is available with the driver outside the vehicle. Make sure the conditions available before activation the Remote Moving Forward/Backward function.

1. Remote Moving Forward/Backward ready:

(1) With the vehicle off: Remotely turn on the vehicle

(2) With the vehicle on: Put the gear shift in P (Park) position and press the Parking Assist button. Then exit the vehicle possessing the smart key.

2. Remote Moving Forward/Backward assist: Press and hold the moving forward/backward button of the smart key to provide the Remote Moving Forward/Backward function through steering wheel, gear shift and vehicle speed control.

3. Remote Moving Forward/Backward complete: When the vehicle reaches the desired position, release the smart key button. Then complete the Remote Moving Forward/Backward function by entering the vehicle possessing the smart key or by pressing the remote start button of the smart key.

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OFE048422L

| | |
|---|---|
| P | Parking Assist button |
| P | Parking Safety button |
| HOLD | Remote start button |
| | Moving forward button |
| | Moving backward button |

### *1. Remote moving ready*

You can activate the Remove Moving Forward/Backward function in 2 ways.

(1) With the vehicle turned off, press the door lock button of the smart key and then within 4 seconds press the remote start button for over 2 seconds.

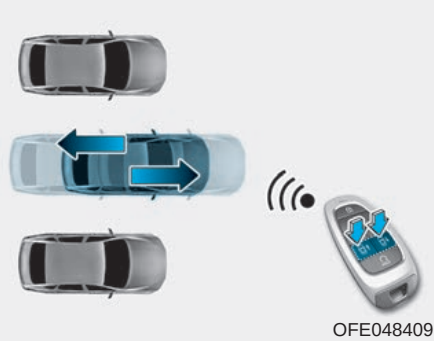
❊ For the details of remote start-up, refer to 'Remote start' in chapter 3.

OFE048142L

(2) Park the vehicle in front of the space where you desire to use the Remote Moving Forward/Backward. Press the Parking Assist button and select the Remote Moving Forward/Backward from infotainment system screen. Exit the vehicle possessing the smart key and check whether all the doors are closed.

❊ When the Remote Moving Forward/Backward is ready by the above no.(2) method, you can use Smart Parking function when the infotainment system operates normally.

### *2. Remote Moving Forward/ Backward function*




- With the vehicle stopped, press and hold one of the moving forward/backward button and then the steering wheel, gear shift and vehicle speed are controlled automatically.
- If the driver releases the moving forward/backward button while the Remote Moving Forward/Backward function is in activation, the control will stop temporarily. Press the button again to resume the control.
- For your safety, the assist is activated only when the smart key is within about 9 ~ 16 ft. (3 ~ 5 m) m from the vehicle.
- The vehicle can travel up to 22 ft. (7 m) per move. Press the moving forward/ backward button to make additional movement.

❊ Press the moving forward/backward button again after checking the distance from the vehicles if the vehicle didn't move after pressing and holding the smart key button for about 5 seconds.

❊ Under cold weather, take enough time before pressing the moving forward/backward button of the smart key after turning on the vehicle remotely. It may take more time until the vehicle moves.

### *3. Remote Moving Forward/ Backward function complete*

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The Remote Moving Forward/ Backward function is complete after the driver enters the vehicle possessing the vehicle, when the vehicle reaches the desired position. In this case, the vehicle stays on.

❊ When Remote Moving Forward/ Backward function is complete, the gear P (Park) and Electronic Parking Brake (EPB) are engaged automatically.

**⚠ WARNING**

**Always be careful of unexpected approach of the other vehicles or pedestrians.**

**⚠ CAUTION**

- **Always check for obstacles around your vehicle before driving.**
- **The function may be cancelled if you attach something (cover, etc.) to the steering wheel.**
- **Make sure all the passengers exit the vehicle when the Remote Moving Forward/ Backward is in activation.**
- **Make sure all the smart keys are outside the vehicle when the Remote Moving Forward/ Backward function is in activation.**

**To cancel the Remote Moving Forward/Backward function while in operation**

(1) Press the remote start button on the smart key.

(2) Shift the gear to to R (Reverse) position while the Remote Moving Forward/Backward function is instructed.

(3) Press the Parking Safety button or the 'Cancel' button on the infotainment system screen while the Remote Moving Forward/ Backward function is instructed.

(4) Driver controls the vehicle during the Remote Moving Forward/Backward

- The Remote Moving Forward/ Backward function is immediately cancelled and the vehicle turns off when the remote start button on the smart key is pressed
- The function is cancelled but the vehicle stays on when the driver enters the vehicle with the smart key and all the doors are closed or the driver depresses the brake pedal.

**The Remote Moving Forward/ Backward function will stop temporarily when:**

(1) An obstacle at the direction the vehicle is heading is detected.

(2) The door or liftgate is open.

(3) The moving forward/backward button on the smart key is released.

(4) Multiple buttons on the smart key are pressed at the same time.

(5) The distance between the smart key and vehicle is over 4 m.

(6) A button on the other smart key is pressed.

(7) Rear Cross-Traffic Collision-Avoidance Assist is activated while reversing.

(8) The vehicle moves 22 ft. (7 m) (maximum travel distance per move) with the Remote Moving Forward/Backward while the smart key is pressed.

❊ The vehicle stops when the Remote Smart Parking function will stop temporarily and the Remote Smart Parking function will resume when the above condition is cleared.

**The Remote Moving Forward/ Backward function is cancelled while in operation when:**

(1) The driver holds the steering wheel while the steering wheel is controlled

(2) The gear is shifted or the Electronic Parking Brake (EPB) is activated

(3) The hood opens

(4) The vehicle speed exceeds 3 mph (5 km/h)

(5) The vehicle accelerates suddenly

(6) The vehicle slips back while controlling the vehicle speed

(7) The wheel is stuck and the vehicle is unable to move

(8) Obstacles are at the front and back of the vehicle at the same time

(9) About 3 minutes and 50 seconds have passed after the Remote Moving Forward/Backward function

(10) The gradient of the road exceeds the range supported by Remote Moving Forward/Backward function

(11) The steering, shifting gear and drive assist are impossible

(12) The suspended state lasts for over 1 minute

(13) The driver continuously presses and releases the smart key's moving forward/backward button over 10 times

(14) The Traction Control System (TCS) is activated while controlling the vehicle speed

(15) The smart key has failure

(16) The accelerator/brake pedal is depressed while all the doors are closed

(17) The brake pedal is depressed while the driver's door is open and the smart key is outside the vehicle

(18) The vehicle travels more than 14 m after the Remote Moving Forward/Backward function is activated

(19) The smart key's remote start button is pressed

(20) The theft alarm system is activated

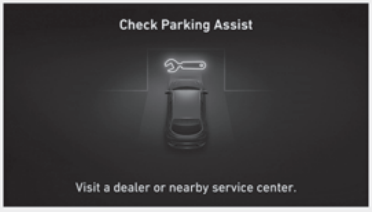
❊ When Remote Moving Forward/ Backward function is complete, the gear P (Park) and Electronic Parking Brake (EPB) are engaged automatically and the vehicle turns off.

## Additional instructions (messages)

When Remote Smart Parking Assist is in operation, the function may be cancelled regardless of the instruction order.

The messages will appear according to the circumstances. Follow the instructions provided while driving your vehicle with Remote Smart Parking Assist in activation.

### *Check Parking Assist*

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If there is a problem with Remote Smart Parking Assist, the above message will appear when the system is turned on.

Also, the indicator on the Parking Assist button will blink and the warning sound will beep three times.

(The Parking Distance Warning can be operable depending on the failure type.)

If you notice any problem, we recommend that without using Remote Smart Parking Assistance, you have the vehicle checked by an authorized HYUNDAI dealer.

### *Parking Assist Conditions Not Met*

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When Remote Smart Parking Assist is not getting ready for activation, the above message will appear when the Parking Assist button is pressed.

Press the Parking Assist button again after a while and check the normal operation of the function.

Smart key battery replacement is required when the screen is output.

## Turn signal showing vehicle state while the function in activation

The turn signal indicates the vehicle state as follows when the Smart Parking, Remote Parking or Smart Exit is in activation:

| Vehicle state | Turn signal |
|---|---|
| Smart Parking/Remote Parking function in activation | The turn signal of the parking direction blinks until the first reversing is complete or deactivated while parking |
| Smart Exit function in activation | The turn signal of the exiting direction blinks until the exit is complete or deactivated |

## Smart key showing vehicle state while the function in activation

The LED on the smart key indicates the vehicle state as follows when the Remote Parking or Remote Moving Forward/Backward is in activation:

| Vehicle state | Smart key LED |
|---|---|
| Remote Parking function in activation | Green LED blinks continuously |
| Remote Parking function temporarily stopped/in stand by | Red LED blinks continuously |
| Remote Parking deactivated | Red LED illuminates for about 4 seconds and then extinguishes |
| Remote Parking complete | Green LED illuminates for about 4 seconds and then extinguishes |

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## Link with other systems

Activation of other systems may be restricted according to the circumstances while Remote Smart Parking Assist is in activation. The systems linked to Remote Smart Parking Assist are as follows:

1. Smart Cruise Control system

(1) Smart Cruise Control can be operated at the same time with Remote Smart Parking Assist until the "Searching for parking space" stage.

(2) Smart Cruise Control is deactivated when Remote Smart Parking Assist enters the "Remote Parking" stage.

(3) After Remote Smart Parking Assist is complete or deactivated, Smart Cruise Control maintains the deactivation status.

2. Auto Hold

(1) The activated Auto Hold is switched to deactivation status when Remote Smart Parking Assist is activated.

(2) The Auto Hold button will not respond while Remote Smart Parking Assist is in activation.

(3) After Remote Smart Parking Assist is complete or deactivated, the Auto Hold will return to the state before Remote Smart Parking Assist was activated.

3. Electronic Stability Control (ESC)

(1) Electronic Stability Control (ESC) system switches from OFF to activation status (ESC OFF button turns off) when Remote Smart Parking Assist is activated.

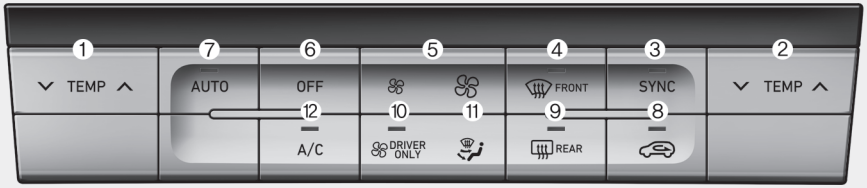
(2) The ESC OFF button will not respond while Remote Smart Parking Assist is in activation.

(3) The ABS/TCS/ESC system activates while Remote Smart Parking Assist is in activation.

(4) After Remote Smart Parking Assist is complete or deactivated, ESC maintains the ON status.

# AUTOMATIC CLIMATE CONTROL SYSTEM

■ Type A




■ Type B

1. Driver's temperature control knob
2. Passenger's temperature control knob
3. SYNC button
4. Front windshield defroster button
5. Fan speed control button
6. OFF button
7. AUTO (automatic control) button
8. Air intake control button
9. Rear window defroster button
10. Driver only button
11. Mode selection button
12. Air conditioning button

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## Automatic Temperature Control Mode

The Automatic Climate Control System is controlled by setting the desired temperature.

1. Press the AUTO button (7).

   The modes, fan speeds, air intake and air-conditioning will be controlled automatically by the temperature setting you select.

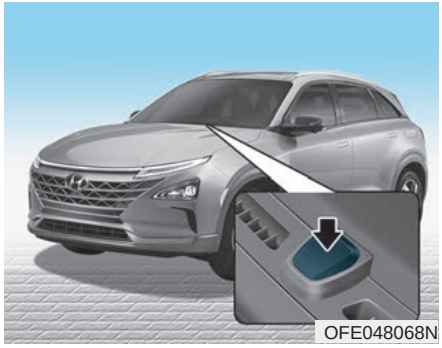
2. Press the temperature control button (1,2) to the desired temperature. If the temperature is set to the lowest setting (Lo), the air conditioning system will operate continuously. After the interior has cooled sufficiently, adjust the button to a proper temperature set point whenever possible.

To turn the automatic operation off, select any button of the following:

- Mode selection button
- Front windshield defroster button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign will illuminate on the information display once again.)
- Fan speed control button

The selected function will be controlled manually while other functions operate automatically.

For your convenience and to improve the efficiency of the climate control, use the AUTO button and set the temperature to 72°F (22°C).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**NOTICE**

**Never place anything near the ambient light/solar sensor to ensure better control of the heating and cooling system.**

## Manual Temperature Control Mode

The heating and cooling system can be controlled manually by pushing buttons other than the AUTO button. In this case, the system works sequentially according to the order of buttons selected.

When pressing any button except the AUTO button while using automatic operation, the functions not selected will be controlled automatically.

1. Start the vehicle.
2. Set the mode to the desired position.

   To improve the effectiveness of heating and cooling, select the mode according to the following:

   - Heating:
   - Cooling:

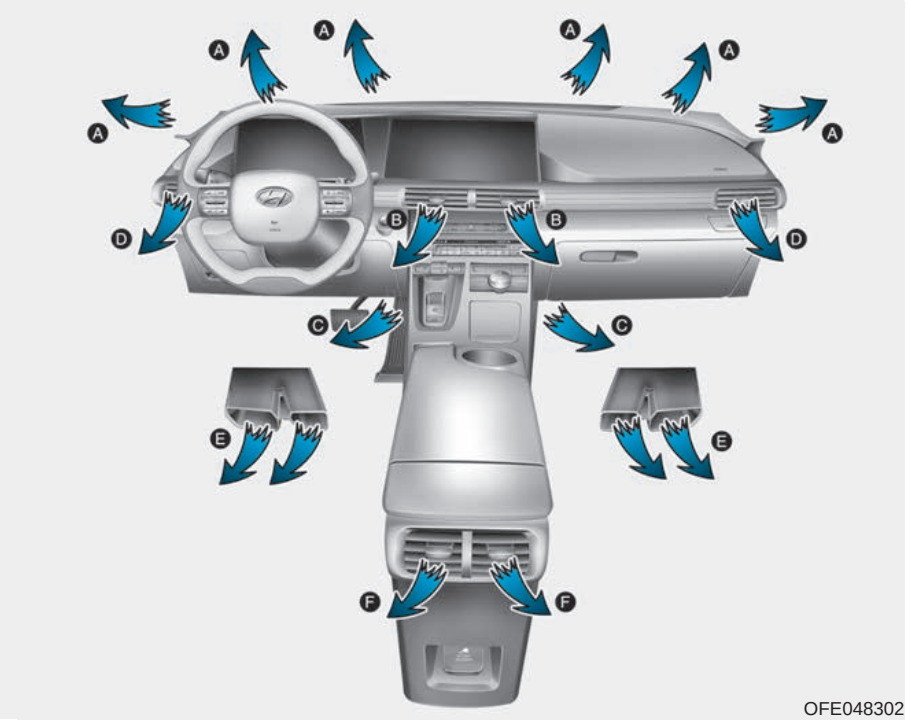
3. Set the temperature control to the desired position.
4. Set the air intake control to Fresh mode or Recirculation mode position.
5. Set the fan speed control to the desired speed.

6. If air conditioning is desired, turn the air conditioning system on.
7. Press the AUTO button to convert to full automatic control of the system.

When starting the vehicle in cold weather a more efficient way to heat the passenger compartment is to do the following.

- Turn off or lower the blower, right after starting the engine.
  - The fuel cell temperature will be low and the heater air is still cold.
- After a few minutes to allow the system to warm up, set the fan to the desired level.

### *Mode selection (11)*




The mode selection button controls the direction of the air flow through the ventilation system.

The air flow outlet direction is cycled as follows:

**Face-Level (B, D, F)**

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.

**Bi-Level (B, C, D, E, F)**

Air flow is directed towards the face and the floor.

**Floor & Defrost (A, C, D, E, F)**

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.

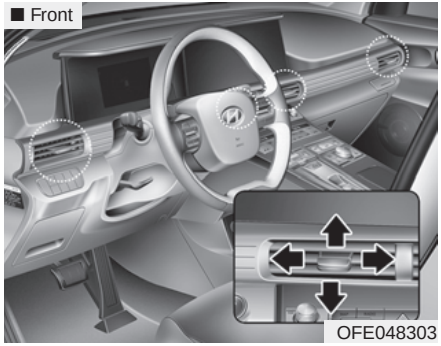
**Floor-Level (A, C, D, E, F)**

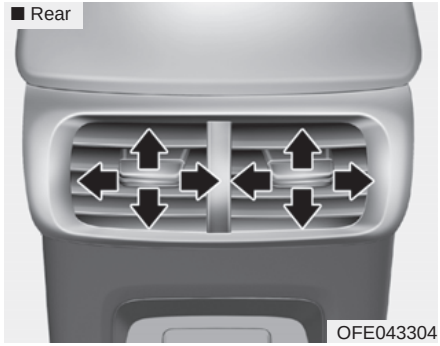
Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield and side window defrosters.

**Defrost-Level (4) (A, D)**

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

### *Instrument panel vents*



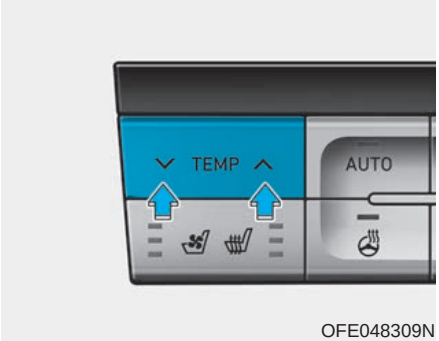

The instrument panel vent air flow can be directed up/down or left/right using the vent adjustment lever.

The air flow can also be CLOSED using the vent adjustment lever. The instrument panel air vents are the "click-to-close" type.

To CLOSE the instrument panel vents perform the following:

- For the driver side vents, slide the vent adjustment lever to the LEFT until it clicks.
- For the passenger side vents, slide the vent adjustment lever to the LEFT until it clicks.

### *Temperature control (1,2)*

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Press the up/down switch to increase/decrease the temperature.

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### Adjusting the driver and passenger side temperature equally

- Press the "SYNC" button to operate the driver and passenger side temperature equally.

  The passenger side temperature will be set to the same temperature as the driver side temperature.
- Push the driver side temperature control switch. The driver and passenger side temperature will be adjusted equally.

### Adjusting the driver and passenger side temperature individually

Press the "SYNC" button again to operate the driver and passenger side temperature individually. The button indicator will turn off.

### Temperature conversion

If the battery has been discharged or disconnected, the temperature mode display will reset to Fahrenheit.

To change the temperature unit from °F to °C or °C to °F:

- Press the AUTO button while pressing the OFF button on the climate control unit for 3 seconds.
- Go to General settings mode → Unit → Temperature in the Infotainment system display.

The temperature unit on both the cluster display and climate control screen will change.

## *Air intake control (8)*

The air intake control button is used to select either Fresh mode (outside air) or Recirculation mode (cabin air).

### Recirculation mode

When Recirculation mode is selected, air from the passenger compartment will be recirculated through the system and heated or cooled according to the function selected.

### Fresh mode

When Fresh mode is selected, air enters the vehicle from outside and is heated or cooled according to the function selected.

### Information

**Operating the system primarily in Fresh mode is recommended. Use Recirculation mode temporarily only when needed.**

**Prolonged operation of the heater in Recirculation mode and without the A/C ON can cause fogging of the windshield.**

**In addition, prolonged use of the A/C ON in Recirculation mode may result in excessively dry, dehumidified air in the cabin and may promote formation of musty vent odor due to stagnant air.**

**⚠ WARNING**

- **Continued use of the climate control system operation in Recirculation mode for a prolonged period of time may cause drowsiness to the occupants in the cabin. This may lead to loss of vehicle control which may lead to an accident.**
- **Continued use of the climate control system operation in Recirculation mode with the A/C OFF may allow humidity to increase inside the cabin. This may cause condensation to accumulate on the windshield and obscure visibility.**
- **Do not sleep in your vehicle or remain parked in your vehicle with the windows up and either the heater or the air conditioning ON for prolonged periods of time. Doing so may increase the levels of carbon dioxide in the cabin which may lead to serious injury or death.**

### *Fan speed control (5)*

The fan speed can be set as desired by pushing the fan speed control button.

More air is delivered with higher fan speeds.

Pressing the OFF button turns off the fan.

**NOTICE**

**Operating the fan when the POWER button is in the ON position could cause the battery to discharge. Operate the blower when the vehicle is in the ready ( ) mode.**

**NOTICE**

**Operating the fan when POWER button is in the ON position could cause the battery to discharge. Operate the fan when the vehicle is in the ready ( ) mode.**

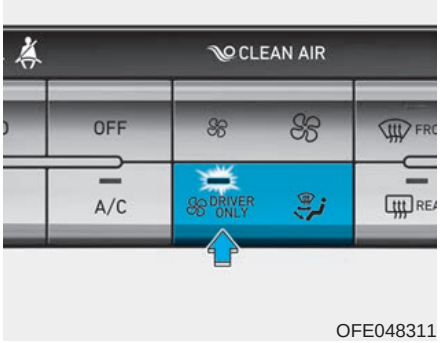
### *Air conditioning (12)*

Push the A/C button to manually turn the system on (indicator light will illuminate) and off.

### *OFF mode (6)*

Push the OFF button to turn the climate control system off. You can still operate the mode and air intake buttons.

### *Driver only*

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If you press the DRIVER ONLY button( DRIVER ONLY ) and the indicator light illuminates, cold air mostly blows in the direction of the driver's seating position. However, some of the cold air may be vented out of other seating position ducts to keep indoor air pleasant.

If you use the button with no passenger in the front passenger seat, energy consumption may be reduced.

DRIVER ONLY button will be turned off under the following conditions:

1) Defrost on (the DRIVER ONLY button indicator is not turned off)
2) DRIVER ONLY button re-push

## System Operation

### *Cooling / Ventilation*

1. Select the Face Level mode.
2. Set the air intake control to fresh mode.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.

### *Heating*

1. Select the Floor Level mode.
2. Set the air intake control to fresh mode.
3. Set the temperature control to the desired position.
4. Set the fan speed control to the desired speed.
5. 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, select the Floor & Defrost mode or press the Front Defrost mode.

### Operation Tips

- If dust or unpleasant fumes are entering the car through the ventilation system, temporarily set the air intake control to the recirculation mode. Return the control to the fresh mode when the unpleasant air outside has diminished. This will help keep the driver alert and comfortable.
- To help prevent the inside of the windshield from fogging, set the air intake control to fresh mode 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*

Your HYUNDAI vehicle air conditioning system is filled with R-1234yf refrigerant.

1. Start the vehicle.
2. Press the air conditioning button.
3. Select the Face Level mode.
4. Set the air intake control to Recirculation mode temporarily to allow the cabin to cool quickly. When the desired temperature in the cabin is reached, change the air intake control back to Fresh mode.
5. Adjust the fan speed control and temperature control to maintain maximum comfort.

When maximum cooling is desired, set the temperature control to the MAX A/C position, then set the fan speed control to the highest setting.

**NOTICE**

**When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures. Air conditioning system operation when climbing a steep grade or in high outside ambient temperatures can cause fuel cell stack overheating.**

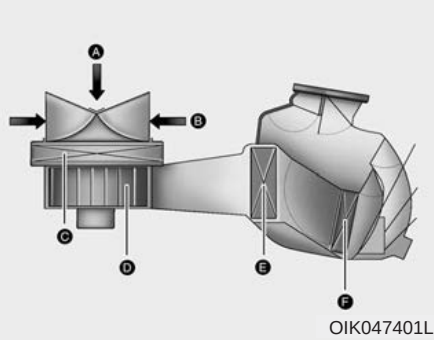
**Continue to use the fan, but turn the air conditioning system off if the temperature gauge indicates fuel cell stack overheating.**

#### 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 recirculation mode to fresh mode.
- 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 sunroof closed.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.
- If you operate air conditioner excessively, the difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection knob or button to the position and fan speed control to the lower speed.

## System Maintenance

### *Cabin air filter*




[A] : Outside air, [B] : Recirculated air
[C] : Climate control air filter, [D] : Blower
[E] : Evaporator core, [F] : Heater core

The cabin air filter is installed behind the glove box. It filters the dust or other pollutants that enter the vehicle through the heating and air conditioning system.

Have the 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.

If the air flow rate suddenly decreases, the system should be checked at an authorized HYUNDAI dealer.

### *Checking the amount of air conditioner refrigerant and compressor lubricant*

When the amount of refrigerant is low, the performance of the air conditioning is reduced. Overfilling also reduces the performance of the air conditioning system.

Therefore, if abnormal operation is found, have the vehicle inspected by an authorized HYUNDAI dealer.

**NOTICE**

**It is important that the correct type and amount of oil and refrigerant is used. Otherwise, damage to the compressor and abnormal system operation may occur. To prevent damage, the air conditioning system in your vehicle should only be serviced by trained and certified technicians.**

**NOTICE**

- **The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.**
- **The refrigerant system should be serviced in a well-ventilated place.**
- **The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842.**

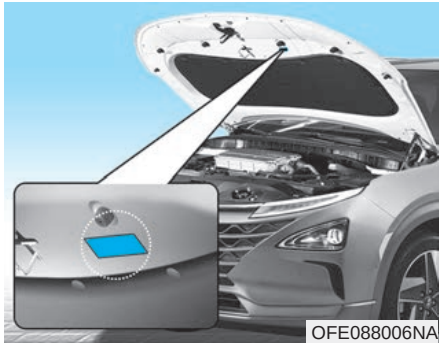
**⚠ WARNING**

**Vehicles equipped with R-1234yf**

**Since the refrigerant is mildly flammable and operated at high pressure, the air conditioning system should only be serviced by trained and certified technicians. It is important that the correct type and amount of oil and refrigerant are used.**

**All refrigerants should be reclaimed with proper equipment.**

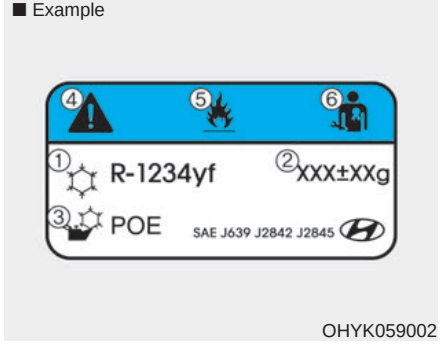
**Venting refrigerants directly to the atmosphere is harmful to individuals and environment. Failure to heed these warnings can lead to serious injuries.**




### Air Conditioning refrigerant label

You can find out which air conditioning refrigerant is applied to your vehicle on the label located inside of the hood.

■ Example




### Each symbols and specification on the

air conditioning refrigerant label is represented as below:

1. Classification of refrigerant
2. Amount of refrigerant
3. Classification of compressor lubricant
4. Caution
5. Flammable refrigerant
6. To require registered technician to service air conditioning system
7. Service manual

# WINDSHIELD DEFROSTING AND DEFOGGING

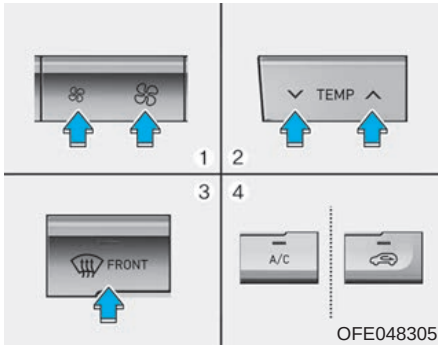
**⚠ WARNING**

**Windshield heating**

**Do not use the or position during cooling operation in extremely humid weather. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility could cause an accident resulting in serious injury or death. In this case, set the mode selection knob or button to the position and fan speed control knob or button to a lower speed.**

- 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, set the mode to 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 in the cowl grill to improve heater and defroster efficiency and to reduce the probability of fogging up the inside of the windshield.

### *Automatic Temperature Control System*

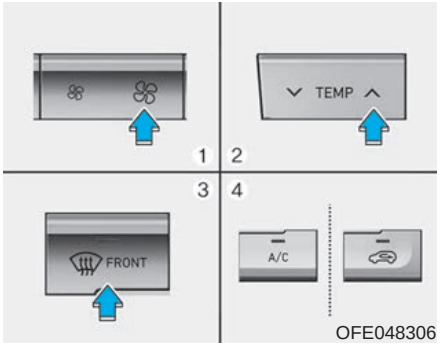



**To defog inside windshield**

1. Select the desired fan speed.
2. Select the desired temperature.
3. Press the defroster button ( ).
4. Fresh mode will be selected automatically.

Check to make sure the air intake control is in Fresh mode. If the air intake control LED is illuminated, press the button once to enable Fresh mode (LED OFF).

If the position is selected, the fan speed is automatically increased.




### To defrost outside windshield

1. Set the fan speed to the highest (extreme right) position.
2. Set the temperature to the extreme hot (HI) position.
3. Press the defroster button ( ).
4. The outside (fresh) air position will be selected automatically.

If the  position is selected, fan speed may increase slightly to improve airflow.

### *Defogging logic*

To reduce the probability of fogging up the inside of the windshield, the air intake or air conditioning are controlled automatically according to certain conditions such as  or  positions. To cancel or reset the defogging logic, do the following.

### Automatic climate control system

1. Turn the POWER button to the ON position.
2. Press the defroster button ( ).
3. While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The Automatic Temperature Control information screen will blink 3 times to indicate that the defogging logic has been disabled.

Repeat the steps again to re-enable the defogging logic.

If the battery has been discharged or negative (-) battery cable is disconnected, it resets to the defog logic status.

## Auto Defogging System (Additional Feature with Automatic Temperature Control System) (if equipped)

Auto defogging helps reduce 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.

### Information

**The auto defogging system may not operate normally, when the outside temperature is below 14 °F (-10 °C).**

When the Auto Defogging System operates, the indicator will illuminate.

If a high amount of humidity is detected in the vehicle, the Auto Defogging System will be enabled. The following steps will be performed automatically:

Step 1) The A/C button will turn ON.

Step 2) The air intake control will change to Fresh mode.

Step 3) The mode will be changed to defrost to direct airflow to the windshield.

Step 4) The fan speed will be set to MAX.

If the air conditioning is off or recirculated air position is manually selected while Auto Defogging System is ON, the Auto Defogging System Indicator will blink 3 times to signal that the manual operation has been canceled.

### To cancel or reset the Auto Defogging System

Press the front windshield defroster button for 3 seconds when the POWER button is in the ON position. When the Auto Defogging System is canceled, the ADS OFF symbol will blink 3 times and ADS OFF will be displayed on the climate control information screen.

When the Auto Defogging System is reset, the ADS OFF symbol will blink 6 times without a signal.

### Information

- When the air conditioning is turned on by Auto defogging system, if you try to turn off the air conditioning, the indicator will blink 3 times and the air conditioning will not be turned off.
- To maintain the effectiveness and efficiency of the Auto Defogging System, do not select Recirculation mode while the system is operating.
- When the Auto Defogging System is operating, the fan speed adjustment button, the temperature adjustment knob, and the air intake control button are all disabled.

**NOTICE**

**Do not remove the sensor cover located on the upper end of the windshield glass.**

**Damage to system parts could occur and may not be covered by your vehicle warranty.**

## Rear Window Defroster

**NOTICE**

**To prevent damage to the rear window defroster conducting elements bonded to the inside surface of the rear window, never use sharp instruments or window cleaners containing abrasives to clean the window.**

**If you want to defrost and defog the front windshield, refer to the "Windshield Defrosting and Defogging" section in this chapter.**

The defroster heats the window to remove frost, fog and thin ice from the interior and exterior of the rear window, while the vehicle is in the ready ( ) mode.

- To activate the rear window defroster, 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 off the defroster, press the rear window defroster button again.

### 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 approximately 20 minutes or when the POWER button is in the OFF position.

### *Side view mirror defroster*

If your vehicle is equipped with the side view mirror defrosters, they will operate at the same time you turn on the rear window defroster.

# CLIMATE CONTROL ADDITIONAL FEATURES

## Air Conditioning Auto-drying (if equipped)

The Air conditioning auto-drying feature dries the moisture in the air conditioner and reduces air conditioner odor. The blower motor automatically operates after 30 minutes 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 Settings > Vehicle > Climate > Air conditioning auto-drying.

If the operating condition is satisfied after setting the feature, the operating condition appears on the infotainment 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 to the face.

### Operating conditions

The Air conditioning auto-drying feature operates under the following 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 stops operating under the following conditions:

- The A/C Automatic Drying feature has operated for 10 minutes.
- The POWER button is moved, or the vehicle is on.
- The climate control system is operated remotely.

### Information

**The Air conditioning auto-drying feature reduces air conditioner odors but may not remove all odors.**

## Automatic Ventilation (if equipped)

When the POWER button is in the ON position or when the vehicle is in the ready ( ) mode and temperature is below 59°F (15°C) with the recirculated air position selected more than five minutes, the air intake position will automatically change to the outside (fresh) air position.

### To cancel or reset the Automatic Ventilation

When the air conditioning system is on, select Face Level mode and press the recirculation mode button five times within three seconds while pressing A/C button.

When the Automatic Ventilation feature is enabled, the recirculation button LED indicator will blink 6 times.

When the Automatic Ventilation feature is disabled, the recirculation button LED indicator will blink 3 times.

## Sunroof Inside Air Recirculation (if equipped)

When the heater or air conditioning system is on with the sunroof opened, the fresh mode will be automatically selected. If you press the recirculation mode button with the sunroof open, recirculation mode activate but will only remain enabled for 3 minutes. After 3 minutes the air intake control will revert back to Fresh mode.

When the sunroof is closed, the air intake position will return to the original position that was selected.

# STORAGE COMPARTMENT

**⚠ WARNING**

**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.**

**⚠ WARNING**

**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 crash, the items may fly out of the compartment and may cause an injury if they strike the driver or a passenger.**

***NOTICE***

**To avoid possible theft, do not leave valuables in the storage compartments.**

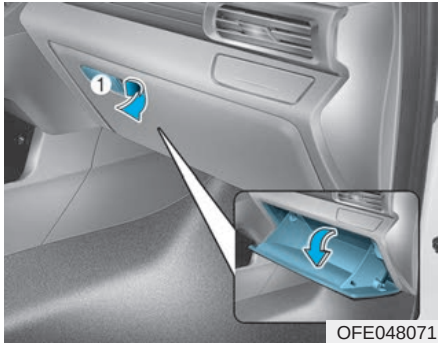
## Center Console Storage

OFE048070

To open :

Grab and hold the latch (1) on the arm rest then lift the lid.

## Glove Box



OFE048071

To open:

Pull the lever (1).

**⚠ WARNING**

**ALWAYS close the glove box door after use.**

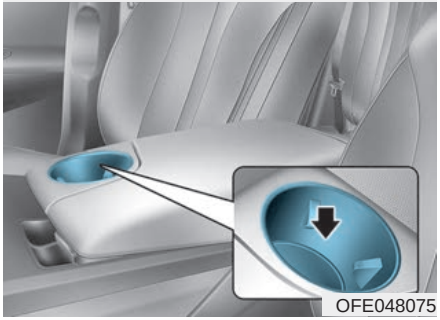
**An open glove box door can cause serious injury to the passenger in an accident, even if the passenger is wearing a seat belt.**

# INTERIOR FEATURES

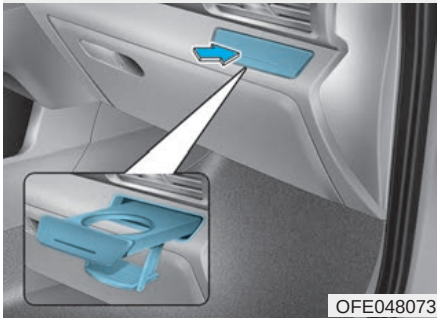
## Cup Holder

### *Front*

■ On center console




■ Above glove box

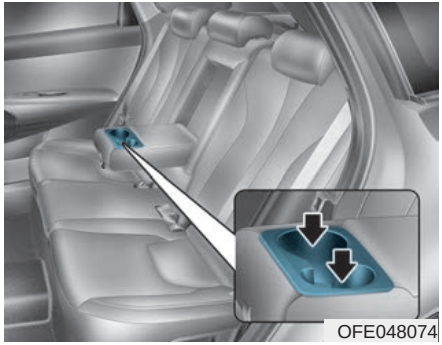



Cups or small beverages cups may be placed in the cup holders.

**⚠ WARNING**

**Placing any heavy objects other than cups or small beverages may damage the cup holder.**

### *Rear*




Pull the armrest down to use the cup holders.

**⚠ WARNING**

- **Avoid abrupt starting and braking when the cup holder is in use to prevent spilling your drink. If hot liquid spills, you could be burned. Such a burn to the driver could cause loss of vehicle control resulting in an accident.**
- **Do not place uncovered or unsecured cups, bottles, cans, etc., in the cup holder containing hot liquid while the vehicle is in motion. Injuries may result in the event of a sudden stop or collision.**
- **Only use soft cups in the cup holders. Hard objects can injure you in an accident.**

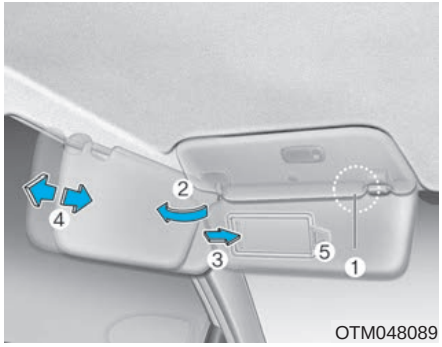
**⚠ WARNING**

**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 your drink. If liquid spills, it may get into the vehicle's electrical/electronic system and damage electrical/electronic parts.**
- **When cleaning spilled liquids do not use hot air to blow out or dry the cup holder. This may damage the interior.**

## Sunvisor




To use the sunvisor, pull it downward.

To use the sunvisor to block the sun from the side window, pull it downward, release it from the bracket (1) and swing it to the side towards the window (2).

To use the vanity mirror, pull down the sunvisor and slide the mirror cover (3).

Adjust the sunvisor forward or backward (4) as needed. Use the ticket holder (5) to hold tickets.

Close the vanity mirror cover securely and return the sunvisor to its original position after use.

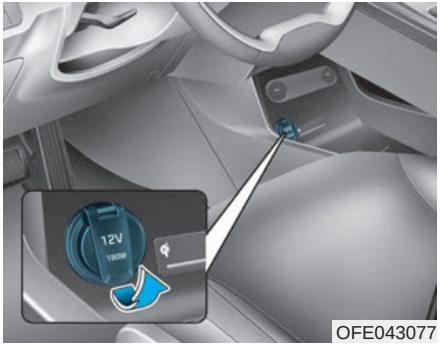
**⚠ WARNING**

**For your safety, do not block your view when using the sunvisor.**

**NOTICE**

**Do not put several tickets in the ticket holder at one time. This could cause damage to the ticket holder.**

## Power Outlet



OFE043077

The power outlet is designed to provide power for mobile telephones or other devices designed to operate with vehicle electrical systems. The devices should draw less than 180 W with the vehicle in the ready ( ) mode.

**⚠ WARNING**

**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.**

**NOTICE**

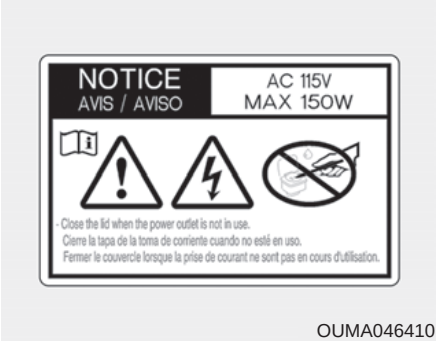
**To prevent damage to the Power Outlets :**

- **Use the power outlet only when the vehicle is in the ready ( ) mode and remove the accessory plug after use. Using the accessory plug for prolonged periods of time with the vehicle off could cause the battery to discharge.**
- **Only use 12V electric accessories which are less than 180 W in electric capacity.**
- **Adjust the air-conditioner or heater to the lowest operating level when using the power outlet.**
- **Close the cover when not in use.**
- **Some electronic devices can cause electronic interference when plugged into a vehicle's power outlet. These devices may cause excessive audio static and malfunctions in other electronic systems or devices used in your vehicle.**
- **Push the plug in as far as it will go. If good contact is not made, the plug may overheat and the fuse may open.**
- **Plug in battery equipped electrical/electronic devices with reverse current protection. The current from the battery may flow into the vehicle's electrical/electronic system and cause system malfunction.**

## AC Inverter (if equipped)

OFE043080N

The AC inverter supplies 115V/150W electric power to operate electric accessories or equipments.



OUMA046410

### Information

- **Rated voltage : AC 115V**
- **Maximum electric power : 150W**
- **In order to avoid an electrical system failure, electric shock, etc., be sure to read owner's manual before use.**
- **Be sure to close the cover except the time of use.**

### ⚠ WARNING

**To reduce a risk of serious or fatal injuries:**

- **Do not use a heated electric device such as a coffeepot, toaster, heater, iron, etc.**
- **Do not insert foreign objects into the outlet and do not touch the outlet as you may get shocked.**
- **Do not let children touch the AC inverter.**

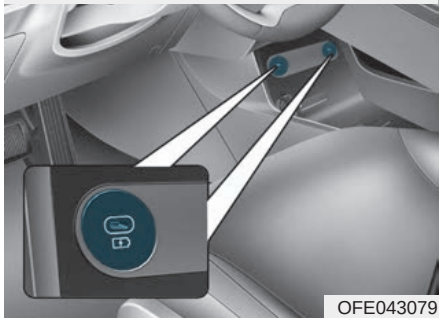
### NOTICE

- **To prevent the battery from being discharged, do not use the AC inverter while the vehicle is not in the ready ( ) mode.**
- **When not using the AC inverter, make sure to close the AC inverter cover.**
- **After using an electric accessory or equipment, pull the plug out. Leaving the accessory or equipment plugged in for a long time may cause battery discharge.**

- **Do not use an electric accessory or equipment the power consumption of which is greater than 150W (115V).**
- **Some electric accessories or equipments can cause electronic interference. It may cause excessive audio noise and malfunctions in other electric systems or devices in the vehicle.**
- **Do not use broken electric accessories or equipments, which may damage the AC inverter and electrical systems of the vehicle.**
- **Do not use two or more electric accessories or equipments at the same time. It may cause damage to the electrical systems of the vehicle.**
- **When the input voltage is lower, outlet LED will blink and the AC inverter will turn off automatically. If the input voltage goes up to normal, the AC inverter will turn on again.**

## USB Charger

■ Front seat



OFE043079

■ Rear seat

OFE043539

The USB charger is designed to recharge batteries of small size electronic devices using a USB cable.

Electronic devices can be charged when the vehicle is running.

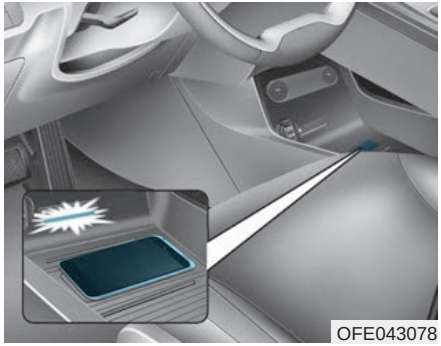
### Information

- **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.**

**NOTICE**

- **Use the USB charger when the vehicle is running. Using the USB charger for prolonged periods of time with the ignition switch in the ON position (vehicle off) may cause the battery to discharge.**
- **To prevent damage to the USB charger:**
  - **Do not insert foreign objects or spill liquid into the outlet. The USB charging terminal may be damaged.**
  - **Do not use devices with working current exceeding 3,000 mA (3.0 A).**
- **When charging an electrical device by using an USB converting adapter (C to A type), use a genuine adapter specified for your vehicle. A commonly used adapter is not equipped with any measures to prevent over current and maintain stability.**
- **Using an unspecified cable may damage the vehicle's USB charger or the connected devices. We recommend you to contact an authorized HYUNDAI dealer for more information on accessories for HYUNDAI vehicles.**
- **The use of non-genuine parts may damage the USB port and infotainment system. Damage cannot be covered by your vehicle warranty.**

## Wireless Cellular Phone Charging System


OFE043078

On certain models, the vehicle comes equipped with a wireless cellular phone charger.

The system is available when all doors are closed, and when the POWER button is ON.

### *To charge a cellular phone*

The wireless cellular phone charging system charges only the Qi-enabled cellular phones ( Qi ). Read the label on the cellular phone accessory cover or visit your cellular phone manufacturer's website to check whether your cellular phone supports the Qi technology.

The wireless charging process starts when you put a Qi-enabled cellular phone on the wireless charging unit.

1. Remove other items, including the smart key, from the wireless charging unit. If not, the wireless charging process may be interrupted. Place the cellular phone on the center of the charging pad ( Qi ).
2. The indicator light is orange when the cellular phone is charging. The indicator light turns green when phone charging is complete.
3. You can turn ON or OFF the wireless charging function in the Vehicle Settings mode on the Infotainment system screen. For further information, refer to the separately supplied "Navigation manual".

### Information

- **Remove other items including the smart key from the wireless charging pad.**
- **For flip type smartphones, when using wireless charging, place the smartphone folded with the device's back placed on the center of the wireless charging unit.**

If your cellular phone is not charging:

- Slightly change the position of the cellular phone on the charging pad.
- Make sure the indicator light is orange.

The indicator light will blink orange for 10 seconds if there is a malfunction in the wireless charging system.

In this case, temporarily stop the charging process, and re-attempt to charge your cellular phone again.

The system warns you with a message on the cluster display if the cellular phone is still on the wireless charging unit after the POWER button is in the OFF position and the front door is opened.

### Information

**For some manufacturer's cellular phones, the system may not warn you even though the cellular phone is left on the wireless charging unit. This is due to the particular characteristic of the cellular phone and not a malfunction of the wireless charging.**

**NOTICE**

- **The wireless cellular phone charging system may not support certain cellular phones, which are not verified for the Qi specification ( Qi ).**
- **When placing your cellular phone on the charging mat, position the phone in the middle of the mat for optimal charging performance. If your cell phone is off to the side, the charging rate may be less and in some cases the cell phone may experience higher heat conduction.**
- **In some cases, the wireless charging may stop temporarily when the Smart Key is used, either when starting the vehicle or locking/unlocking the doors, etc.**

- When charging certain cellular phones, the charging indicator may not change to green when the cell phone is fully charged.
- The wireless charging process may temporarily stop, when temperature abnormally increases inside the wireless cellular phone charging system. Stop the charging cellular phone and wait until temperature falls to a certain level.
- The wireless charging process may temporarily stop when there is any metallic item, such as a coin, between the wireless cellular phone charging system and the cellular phone.
- When charging some cellular phones with a self-protection feature, the wireless charging speed may decrease and the wireless charging may stop.
- If the cellular phone has a thick cover, the wireless charging may not be possible.
- If the cell phone is not completely contacting the charging pad, wireless charging may not operate properly.
- Some magnetic items like credit cards, phone cards or rail tickets may be damaged if left with the cellular phone during the charging process.
- When any cellular phone without a wireless charging function or a metallic object is placed on the charging pad, a small noise may sound. This small sound is due to the vehicle discerning compatibility of the object placed on the charging pad. It does not affect your vehicle or the cellular phone in any way.

### Information

If the POWER button is in the OFF position, the charging also stops.

### Information

This device complies with part 15 of the FCC Rules.

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.

## Clock

**⚠ WARNING**

**Do not attempt to adjust the clock while driving. Doing so may result in distracted driving which may lead to an accident involving personal injury or death.**

Select the Vehicle Settings menu on the Infotainment system screen ➟ Select [Date/Time].

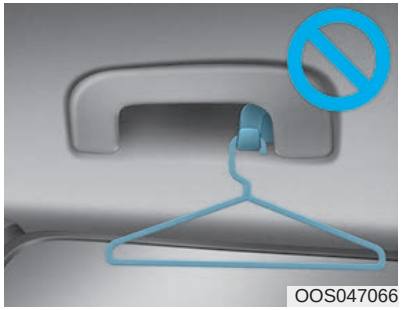
- GPS time: Displays time according to the received GNSS time.
- Daylight saving time : The clock is adjusted forward one hour.
- Time format : Switches to 12 hour or 24 hour.

**For more details, refer to the separately supplied Navigation manual.**

## Coat Hook

These hangers are not designed to hold large or heavy items.

**⚠ WARNING**




**Do not hang other objects such as hangers or hard objects except clothes. Also, do not put heavy, sharp or breakable objects in the clothes pockets. In an accident or when the curtain air bag is inflated, it may cause vehicle damage or personal injury.**

## Floor Mat Anchor(s)

OFE048081

ALWAYS use the Floor Mat Anchors to attach the front floor mats to the vehicle. The anchors on the front floor carpet keep the floor mats from sliding forward.

**⚠ WARNING**

**Do not overlay additional mats or liners over the floor mats. If using All Weather mats, remove the carpeted floor mats before installing them. Only use floor mats designed to connect to the anchors.**

**⚠ WARNING**

**The following must be observed when installing ANY floor mat to the vehicle.**

- **Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.**
- **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 (e.g. all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.**

**IMPORTANT - Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, HYUNDAI recommends that the HYUNDAI floor mat designed for use in your vehicle be installed.**

## Luggage Net Holder (if equipped)

OFE048082

To keep items from shifting in the luggage compartment, you can use the 4 holders located in the luggage board to attach the luggage net.

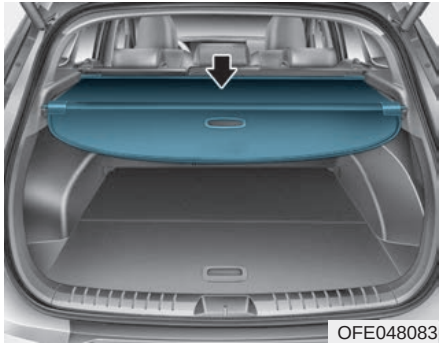
Make sure the luggage net is securely attached to the holders in the luggage board.

**⚠ WARNING**

**Avoid eye injury. DO NOT over-stretch the luggage net. ALWAYS keep your face and body out of the luggage net's recoil path. DO NOT use the luggage net when the strap has visible signs of wear or damage.**

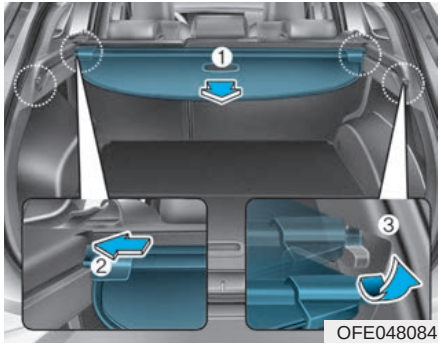
**Use the luggage net to keep only light items from shifting in the luggage compartment.**

## Cargo Security Screen


OFE048083

Use the cargo security screen to cover items stored in the cargo area.

### *To use the cargo security screen*



OFE048084

1. Pull the cargo security screen towards the rear of the vehicle by the handle (1).
2. Insert the guide pin (2) into the guide (3).

**i Information**

**Pull out the cargo security screen with the handle in the center to prevent the guide pin from falling out of the guide.**

**When the cargo security screen is not in use:**

1. Pull the cargo security screen backward and up to release it from the guides.
2. The cargo security screen will automatically slide back in.

### Information

**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 into the mechanism.**

### *To remove the cargo security screen*

OFE048085

1. Push one side of the cargo screen inward to compress the spring mechanism and release the screen from the vehicle.
2. While the mechanism is compressed, pull out the cargo security screen.

### ⚠ WARNING

- **Do not place objects on the cargo security screen. Such objects may be thrown about inside the vehicle and possibly injure vehicle occupants during an accident or when braking.**
- **Never allow anyone to ride in the luggage compartment. It is designed for luggage only.**
- **Maintain the balance of the vehicle and locate the weight as forward as possible.**

# EXTERIOR FEATURES

## Roof Side Rails (if equipped)

OFE048086

If your vehicle comes equipped with roof side rails, then roof rack crossbars can be installed on top of your vehicle.

The roof rack crossbars are an accessory and are available at your local HYUNDAI dealer.

**NOTICE**

**If the vehicle is equipped with a sunroof, be sure not to position cargo onto the roof rack in such a way that it could interfere with sunroof operation.**

**NOTICE**

- **When carrying cargo on the roof rack, take the necessary precautions to make sure the cargo does not damage the roof of the vehicle.**
- **When carrying large objects on the roof rack, make sure they do not exceed the overall roof length or width.**

**⚠ WARNING**

- **The following specification is the maximum weight that can be loaded onto the roof rack. Distribute the load as evenly as possible onto the roof rack and secure the load firmly.**

  **Loading cargo or luggage in excess of the specified weight limit on the roof rack may damage your vehicle.**

| | |
|---|---|
| ROOF RACK | Max 220 lbs. (100 kg) EVENLY DISTRIBUTED |

- **The vehicle center of gravity will be higher when items are loaded onto the roof rack. Avoid sudden starts, braking, sharp turns, abrupt maneuvers or high speeds that may result in loss of vehicle control or rollover resulting in an accident.**
- **Always drive slowly and turn corners carefully when carrying items on the roof rack. Severe wind updrafts, caused by passing vehicles or natural causes, can cause sudden upward pressure on items loaded on the roof rack. This is especially true when carrying large, flat items such as wood panels or mattresses. This could cause the items to fall off the roof rack 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 rack are securely fastened.**

# Infotainment System

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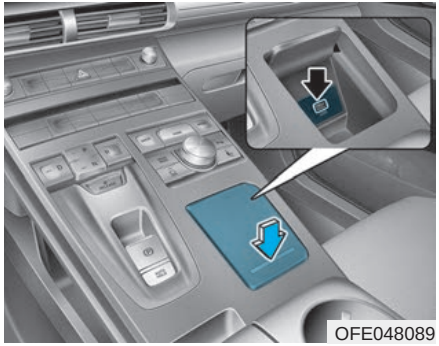
Steering Wheel Audio Control.....4-3
Bluetooth® Wireless Technology .....4-4
Blue Link® Center .....4-4
Infotainment System.....4-4

# INFOTAINMENT SYSTEM

## Information

- **If you install an aftermarket HID headlight, your vehicle's audio and electronic devices may malfunction.**
- **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.**

## USB port




You can use an USB port to plug in an USB.

To use the USB, open the front console cover by slightly pressing the lower part of the cover.

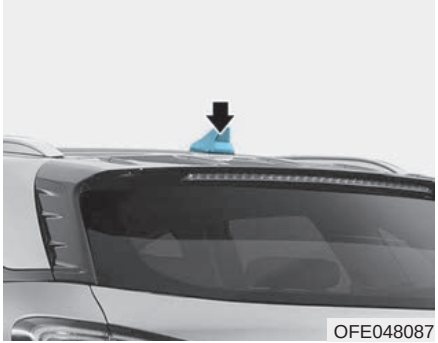
After use, to close the cover, slightly pull down the cover.

## Information

**When using a portable audio device connected to the power outlet, noise may occur during playback. If this happens, use the power source of the portable audio device.**

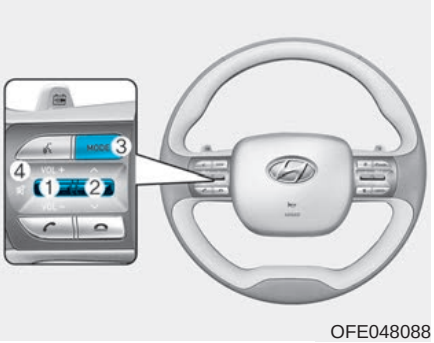
## Antenna

### *Shark fin antenna*




The shark fin antenna will receive the AM, FM broadcast signals, SXM, LTE and transmit data.

## Steering Wheel Audio Control



OFE048088

**NOTICE**

**Do not operate multiple audio remote control buttons simultaneously.**

### *VOLUME (VOL + / - ) (1)*

- Press the VOLUME (+) switch up to increase volume.
- Press the VOLUME (-) switch down to decrease volume.

### *SEEK/PRESET ( ∧ / ∨ ) (2)*

If the SEEK/PRESET switch is pressed up or down and held for 0.8 second or more, it will function in the following modes:

**RADIO mode**

It will function as the AUTO SEEK select button. It will SEEK until you release the button.

**MEDIA mode**

It will function as the FF/RW button.

If the SEEK/PRESET switch is pressed up or down, it will function in the following modes:

**RADIO mode**

It will function as the PRESET STATION UP/DOWN button.

**MEDIA mode**

It will function as the TRACK UP/DOWN button.

### *MODE (3)*

Press the MODE button to toggle through Radio, SXM, or Media mode.

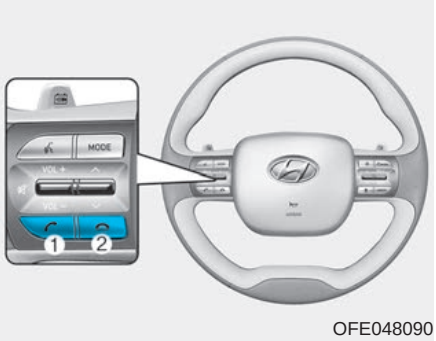
### *MUTE ( 🔇 ) (4)*

- Press the MUTE button to mute the sound.
- Press the MUTE button again to activate the sound.

### *i* Information

**Detailed information for audio control buttons are described in the separately supplied manual with the vehicle.**

## *Bluetooth*® Wireless Technology




OFE048090

OFE048091N

(1) Call / Answer button
(2) Call end button
(3) Microphone

Detailed information for the Bluetooth hands-free is described in a separately supplied manual with the vehicle.

## Blue Link® Center

OFE048476N

For details, refer to the Blue Link® Owner's Guide, Navigation Manual or Audio Manual.

## Infotainment System

Detailed information for the Infotainment system is described in a separately supplied manual with the vehicle.

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**⚠ WARNING**

**Keep the air intakes clear.**

To assure proper operation of the ventilation system, keep the ventilation air intakes located in front of the windshield clear of snow, ice, leaves, or other obstructions.

**If you must drive with the liftgate open:**

Close all windows.

Open instrument panel air vents.

Set the air intake control at "Fresh", the air flow control at "Floor" or "Face", and the fan control set to high.

**⚠ WARNING**

**CALIFORNIA PROPOSITION 65 WARNING**

**A wide variety of automobile components including components found in the interior furnishings in a vehicle, contain or emit harmful chemicals known to the State of California to cause cancer and birth defects and reproductive harm. In addition, certain fluids contained in vehicles and certain products of components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.**

# BEFORE DRIVING

## Before Entering the Vehicle

- Be sure all windows, outside mirror(s), and outside lights are clean and unobstructed.
- Remove frost, snow, or ice.
- Visually check the tires for uneven wear and damage.
- Check under the vehicle for any sign of leaks.
- Be sure there are no obstacles behind you if you intend to back up.

## Before Starting

- 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 outside rearview mirrors.
- Verify all the lights work.
- Fasten your seatbelt. Check that all passengers have fastened their seatbelts.
- Check the gauges and indicators in the instrument panel and the messages on the instrument display when the POWER button is in the ON position.
- Check that any items you are carrying are stored properly or fastened down securely.

**⚠ WARNING**

To reduce the risk of SERIOUS INJURY or DEATH, take the following precautions:

- ALWAYS wear your seat belt. All passengers must be properly belted whenever the vehicle is moving. For more information, refer to "Seat Belts" in chapter 2.
- Always drive defensively. Assume other drivers or pedestrians may be careless and make mistakes.
- Stay focused on the task of driving. Driver distraction can cause accidents.
- Leave plenty of space between you and the vehicle in front of you.

**⚠ WARNING**

NEVER drink or take drugs and drive.

Drinking or taking drugs and driving is dangerous and may result in an accident and SERIOUS INJURY or DEATH.

Drunk driving is the number one contributor to the highway death toll each year. Even a small amount of alcohol will affect your reflexes, perceptions and judgment. Just one drink can 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 as or more dangerous than driving under the influence of alcohol.

You are much more likely to have a serious accident if you drink or take drugs and drive. If you are drinking or taking drugs, don't drive. Do not ride with a driver who has been drinking or taking drugs. Choose a designated driver or call a taxi.

## POWER BUTTON

**⚠ WARNING**

**To reduce the risk of SERIOUS INJURY or DEATH, take the following precautions:**

- **NEVER allow children or any person who is unfamiliar with the vehicle to touch the POWER button or related parts. Unexpected and sudden vehicle movement can occur.**
- **NEVER reach through the steering wheel for the POWER button or any other control, while the vehicle is in motion. The presence of your hand or arm in this area may cause a loss of vehicle control resulting in an accident.**

OFE058001

Whenever the front door is opened, the POWER button will illuminate and will go off 30 seconds after the door is closed.

**⚠ WARNING**

**To turn the vehicle off in an emergency:**

**Press and hold the POWER button for more than two seconds OR Rapidly press and release the POWER button three times (within three seconds).**

**If the vehicle is still moving, you can restart the vehicle without depressing the brake pedal by pressing the POWER button with the gear in the N (Neutral) position.**

**⚠ WARNING**

- **NEVER press the POWER button while the vehicle is in motion except in an emergency. This will result in the vehicle turning off and loss of power assist for the steering and brake systems. This may lead to loss of directional control and braking function, which could cause an accident.**
- **Before leaving the driver's seat, always make sure the gear is in the P (Park) position, set the parking brake, press the POWER button to the OFF position, and take the Smart Key with you. Unexpected vehicle movement may occur if these precautions are not followed.**

## POWER Button Positions

| Button Position | Action | Notice |
|---|---|---|
| **OFF** | To turn off the vehicle, press the POWER button with the gear in P (Park).<br>Also, the vehicle will turn off when the POWER button is pressed with the gear in D (Drive) or R (Reverse) because the gear automatically shifts to the P (Park) position. But, when it is pressed in N (Neutral), the POWER button will go to the ACC position. | If the steering wheel is not locked properly when you open the driver's door, the warning chime will sound. |
| **ACC** | Press the POWER button when the button is in the OFF position without depressing the brake pedal.<br>Some electrical accessories are usable. | If the steering wheel doesn't unlock properly, the POWER button will nor work. Press the POWER button while turning the steering wheel right and left to release tension. |

| Button Position | Action | Notice |
|---|---|---|
| **ON** | Press the POWER button while it is in the ACC position without depressing the brake pedal. | Do not leave the POWER button in the ON position when the vehicle is not in the ready ( ) mode to prevent the battery from discharging. |
| **START** | To start the vehicle, depress the brake pedal and press the POWER button with the gear in the P (Park) position. | If you press the POWER button without depressing the brake pedal, the vehicle does not start and the POWER button changes as follows:<br>**OFF → ACC → ON → OFF or ACC** |

## Starting the Vehicle

**⚠ WARNING**

- **Always wear appropriate shoes when operating your vehicle. Unsuitable shoes, such as high heels, ski boots, sandals, flip-flops, etc., may interfere with your ability to use the brake and accelerator pedals.**
- **Do not start the vehicle with the accelerator pedal depressed.**

  **The vehicle can move and lead to an accident.**

### *i* Information

- **The vehicle will start by pressing the POWER button, only when the smart key is in the vehicle.**
- **Even if the smart key is in the vehicle, and when it is far away from the driver, the vehicle may not start.**
- **When the POWER button is in the ACC or ON position, any door is open, the system checks for the smart key. When the smart key is not in the vehicle, the " " indicator will blink and the warning "Key not in vehicle" will come on. When all doors are closed, the chime will also sound for about 5 seconds. Keep the smart key in the vehicle when in the ACC position or if the vehicle is in the ready ( ) mode.**

1. Always carry the smart key with you.
2. Make sure the parking brake is applied.
3. Make sure the gear is in P (Park).
4. Depress the brake pedal.
5. Press the POWER button. If the vehicle starts, the " " indicator will come on.

### *i* Information

- **Always start the vehicle with your foot on the brake pedal.**
- **If ambient temperature is low, the " " indicator may remain illuminated longer than the normal amount of time.**

**NOTICE**

**To prevent damage to the vehicle:**

**If the " " indicator turns off while you are in motion, do not attempt to shift to the P (Park) position.**

**NOTICE**

**To prevent damage to the vehicle:**

**When the stop lamp fuse is blown, you cannot normally start the vehicle. Replace the fuse with a new one. If you are not able to replace the fuse, you can start the vehicle by pressing and holding the POWER button for 10 seconds with the POWER button in the ACC position.**

**Do not press the POWER button for more than 10 seconds except when the stop lamp fuse is blown.**

**For your safety always depress the brake pedal before starting the vehicle.**

### *Emergency starting*

If the smart key battery is weak or the smart key does not work correctly, you can start the vehicle by pressing the POWER button with the smart key in the direction of the picture above.

## Turning Off the Vehicle

1. Depress the brake pedal fully.
2. Shift to P (Park).
3. Apply the parking brake.
4. Press the POWER button to turn the vehicle off.
5. Make sure the " " indicator light on the instrument cluster is turned off.

**⚠ CAUTION**

**If the " " indicator light on the instrument cluster is still on, the vehicle is not turned off and can move when the gear is in any position except P (Park).**

# REDUCTION GEAR

## Reduction Gear Operation

**⚠ WARNING**

**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 gear is in the P (Park) position, then set the parking brake, and place the POWER button in the OFF position. Unexpected and sudden vehicle movement can occur if these precautions are not followed.**

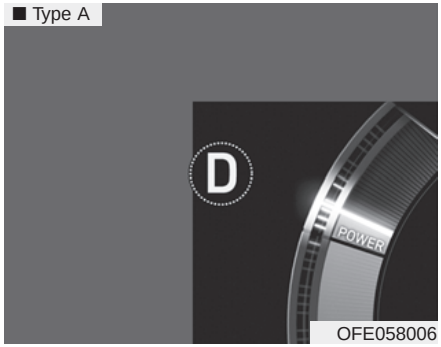
OFE058005L

Select gear positions by pressing the shift button.

For your safety, always depress the brake pedal while shifting to another gear.

### *Gear position*

■ Type A



OFE058006

■ Type B

OCN7040013N

The indicator in the instrument cluster displays the gear position when the POWER button is in the ON position.

### P (Park)

Always come to a complete stop before shifting into P (Park).

To shift the gear from R (Reverse), N (Neutral) or D (Drive) to P (Park), press the [P] button.

If you turn off the vehicle in D (Drive) or R (Reverse), the gear automatically shifts to P (Park).

**⚠ WARNING**

- **Shifting into P (Park) while the vehicle is in motion may cause you to lose control of the vehicle.**
- **After the vehicle has stopped, always make sure the gear is in P (Park), apply the parking brake, and turn the vehicle off.**
- **Do not use the P (Park) position in place of the parking brake.**

### R (Reverse)

Use this position to drive the vehicle backward.

To shift to R (Reverse), press the [R] button while depressing the brake pedal.

### N (Neutral)

The wheels and gear are not engaged.

To shift to N (Neutral), press the [N] button while depressing the brake pedal.

Always depress the brake pedal when you are shifting from N (Neutral) to another gear.

In N (Neutral), if the driver attempts to turn off the vehicle, the gear remains in N (Neutral) and the POWER button will be in the ACC position.

To turn off the vehicle from the ACC position, press the [P] button within 3 minutes. The vehicle will shift to P (Park) and turn off.

When the driver's door is opened within 3 minutes with the POWER button in the ACC position and the gear in N (Neutral), the vehicle is automatically turned OFF and shifted to the P (Park) position.

### D (Drive)

This is the normal driving position.

To shift to D (Drive), press the [D] button while depressing the brake pedal.

### *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.

To shift from P (Park) or N (Neutral) into R (Reverse) or D (Drive) :

1. Depress and hold the brake pedal.
2. Start the vehicle or place the POWER button in the ON position.
3. Press the R (Reverse) or D (Drive) button.

### *When the battery (12 V) is discharged*

You cannot shift the gear when the battery is discharged.

Jump start your vehicle (refer to “Jump Starting” in chapter 6) or contact an authorized HYUNDAI dealer.

## Parking

Always come to a complete stop and continue to depress the brake pedal. Shift to the P (Park) position, apply the parking brake, and place the POWER button in the OFF position. Take the Key with you when exiting the vehicle.

## Cluster Display Messages

### *Shifting conditions not met*

OFE051008N

The message appears on the cluster display when driving speed is too fast to shift the gear.

Decrease the vehicle speed or slow down before shifting the gear.

### *Press brake pedal to change gear*

OFE051009N

The message appears on the cluster display, when the brake pedal is not depressed while shifting the gear.

Depress the brake pedal and then shift the gear.

### *Shift to P after stopping*

OFE051010N

The message appears on the cluster display when the gear is shifted to P (Park) while the vehicle is moving.

Stop the vehicle before shifting to P (Park).

### *Gear already selected*

OFE051014N

The message appears on the cluster display when the selected gear button is pressed again.

### *Shift button held down*

OFE051015N

The message appears on the cluster display when the shift button is continuously pressed or there is problem with the button.

Make sure that there is no object over the shift button. If the problem persists, immediately have the vehicle inspected by an authorized HYUNDAI dealer.

### *Check shift controls*

OFE051016N

The message appears on the cluster display when there is problem with the shift buttons.

Immediately have the vehicle inspected by an authorized HYUNDAI dealer.

### *PARK malfunction. Engage parking brake when parking vehicle*

OFE041530N

The message appears on the cluster display when there is problem with function engaging P (Park) position.

Immediately have the vehicle inspected by an authorized HYUNDAI dealer.

## Good Driving Practices

- Never shift to P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never shift to P (Park) when the vehicle is in motion.

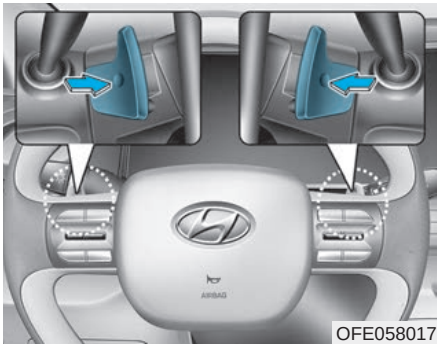
  Be sure the vehicle is completely stopped before you attempt to shift into R (Reverse) or D (Drive).
- Do not shift to N (Neutral) when driving. Doing so may result in an accident.
- Do not drive with your foot resting on the brake pedal. Even light, but consistent pedal pressure can result in the brakes overheating, brake wear and possibly even brake failure.
- Always apply the parking brake when leaving the vehicle. Do not depend on placing the 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.

**⚠ WARNING**

**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 recommends you follow all posted speed limits.**
- **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 cluster before driving. If the vehicle moves in the opposite direction of the selected gear, the engine may turn off and a serious accident might occur due to degraded brake performance.**

## PADDLE SHIFTER (REGENERATIVE BRAKING CONTROL)


OFE058017

The paddle shifter is used to adjust the regenerative braking rate from 0 to 3 during decelerating or braking.

- Left side ( ): Increases regenerative braking and deceleration.
- Right side ( ): Decreases regenerative braking and deceleration.
- Pull and hold the left side paddle shifter to change to 0.
- Pull and hold the left side paddle shifter to change to 3.

### Information

**The paddle shifter does not operate when:**

- **Both Paddle shifters are pulled at the same time.**
- **The Smart Cruise Control system is activated.**
- **The vehicle is shifted to P (Park), R (Reverse) and N (Neutral).**

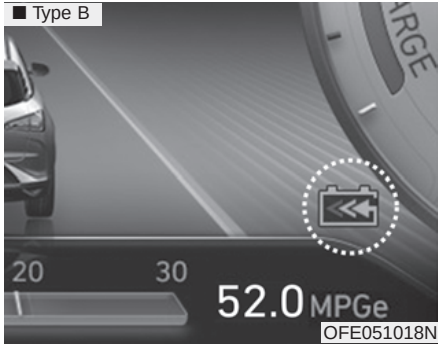
**NOTICE**

**If the battery is fully charged when descending down a long or steep hill, the regenerative braking is not working even though operating the paddle shifter. In this case, depress the brake pedal to brake the vehicle. This is normal and does not indicate a problem with your paddle shifter and brakes.**

■ Type A

OFE058136N

■ Type B



OFE051018N

The selected regenerative braking rate is displayed on the instrument cluster.

### *What Does Regenerative Braking Do?*

It uses the electric motor when decelerating or braking which transforms vehicle motion (kinetic energy) to electrical energy to charge the high voltage batteries.

# BRAKING SYSTEM

## Power Brakes

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

If the power is not supplied such as battery discharge, the power assist for the brakes will not work. You can still stop your vehicle by applying greater force to the brake pedal than typical. The stopping distance, however, will be longer than with power brakes.

Do not pump 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.**

### 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 (left side lever) to increase regenerative braking control in order to control your speed without using the brake pedal excessively. Applying the brakes continuously will cause the brakes to overheat and could result in a temporary loss of braking performance.**
- **Wet brakes may impair the vehicle's ability to safely slow down; the vehicle may also pull to one side when the brakes are applied. Applying the brakes lightly will indicate 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.**

**NOTICE**

- **Do not continue depressing the brake pedal if the " " indicator is OFF. The battery may be discharged.**
- **Noise and vibration generated during braking is normal.**
- **Under normal operation, electric brake pump noise and motor vibration may occur temporarily in below cases.**
  - **When the pedal is depressed suddenly.**
  - **When the pedal is repeatedly depressed in short intervals.**
  - **When the ABS function is activated while braking.**

## Disc Brake Wear Indicator

When your brake pads are worn and new pads are required, you will 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.

**NOTICE**

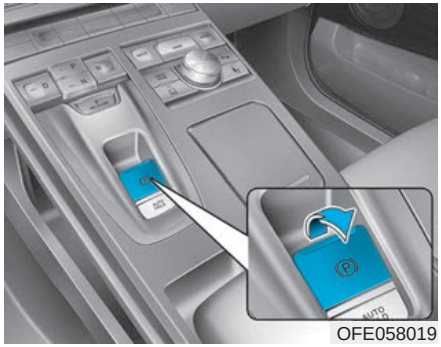
**To avoid costly brake repairs, do not continue to drive with worn brake pads.**

### Information

**Always replace brake pads as complete front or rear axle sets.**

## Electronic Parking Brake (EPB)

### *Applying the parking brake*



OFE058019

**To apply the EPB (Electronic Parking Brake):**

1. Depress the brake pedal.
2. Pull the EPB switch upwards.

Make sure the Parking Brake Warning Light comes on.

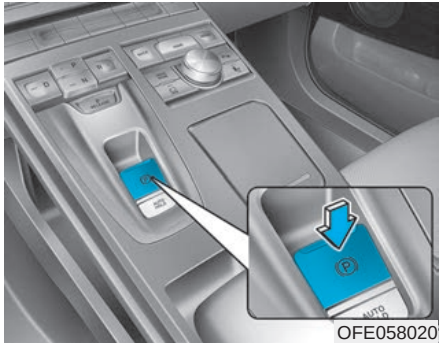
With the AUTO HOLD feature enabled, the EPB is automatically applied when the vehicle is shut off.

However, if the Auto Hold function is not activated, the EPB is not automatically applied even though the vehicle stops and turned off.

**⚠ WARNING**

**To reduce the risk of SERIOUS INJURY or DEATH, do not operate the parking brake while the vehicle is moving except in an emergency situation. It could damage the brake system and lead to an accident.**

### *Releasing the parking brake*



OFE058020

**To release the EPB (Electronic Parking Brake), press the EPB switch in the following condition:**

- Have the POWER button in the ON position.
- Depress the brake pedal.

Make sure the Parking Brake Warning Light goes off.

**To release EPB (Electronic Parking Brake) automatically:**

- Shifted to P (Park)

  With the vehicle in the ready ( ) mode depress the brake pedal and shift out of P (Park) to R (Reverse), D (Drive).
- Shifted to N (Neutral)

  With the vehicle in the ready ( ) mode depress the brake pedal and shift out of N (Neutral) to R (Reverse) or D (Drive).
- Under the following conditions
  1. Start the vehicle.
  2. Fasten the driver's seat belt.
  3. Close the driver's door, hood and liftgate.
  4. Depress the accelerator pedal while the gear is in D (Drive) or R (Reverse).

The Parking Brake Warning Light should be turned off when the EPB is released.

### Information

- **For your safety, you can engage the EPB even though the POWER button is in the OFF position, but you cannot release it.**
- **For your safety, depress the brake pedal and release the parking brake manually with the EPB switch when you drive downhill or when backing up the vehicle.**

**NOTICE**

- **If the parking brake warning light is still on even though the EPB has been released, have the system checked by an authorized HYUNDAI dealer.**
- **Do not drive your vehicle with the EPB applied. It may cause excessive brake pad and brake rotor wear.**

**EPB (Electronic Parking Brake) may be automatically applied when:**

- Requested by other systems
- If the driver turns the vehicle off while Auto Hold is operating, EPB will be automatically applied.

### *Warning messages*

OFE061038N

**To release EPB, fasten seatbelt and close door, hood and liftgate**

- If you try to drive with the EPB applied, a warning will sound and a message will appear.
- If the driver's seat belt is not fastened and the hood or liftgate is opened, a warning will sound and a message will appear.
- If there is a problem with the vehicle, a warning may sound and a message may appear.

If the situation occurs, depress the brake pedal and release EPB by pressing the EPB switch.

## ⚠ WARNING

- **To prevent unintentional movement when stopped and leaving the vehicle, do not use the P (Park) position in place of the parking brake. Set the parking brake and make sure the vehicle is securely positioned in P (Park).**
- **Never allow anyone who is unfamiliar with the vehicle to touch the parking brake. If the parking brake is released unintentionally, serious injury may occur.**
- **All vehicles should always have the parking brake fully engaged when parking to avoid inadvertent movement of the car which can injure occupants or pedestrians.**

## NOTICE

- **A click sound may be heard while operating or releasing the EPB, but these conditions are normal and indicate that the EPB is functioning properly.**
- **When leaving your keys with a parking lot attendant or valet, make sure to inform him/her how to operate the EPB.**
- **The EPB may malfunction if you drive with the EPB applied.**
- **When you automatically release EPB by depressing the accelerator pedal, depress it slowly.**

OIK060067L

### AUTO HOLD turning Off! Press brake pedal

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

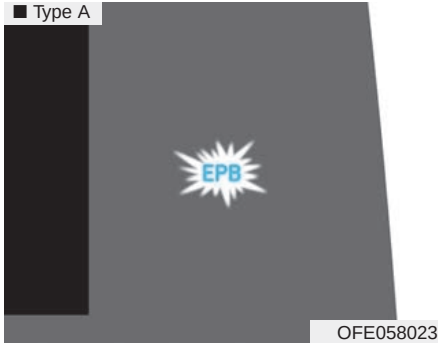
OIK060069L

**Parking brake automatically engaged**

If the EPB is applied while Auto Hold is activated, a warning will sound and a message will appear.

### *EPB malfunction indicator*

■ Type A



OFE058023

■ Type B

OFE041531N

This warning light illuminates if the POWER button is changed to the ON position and goes off in approximately 3 seconds if the system is operating normally.

If the EPB malfunction indicator remains on, comes on while driving, or does not come on when the POWER button is changed to the ON position, this indicates that the EPB may have malfunctioned.

If this occurs, have the system checked by an authorized HYUNDAI dealer.

The EPB malfunction indicator may illuminate when the ESC (Electronic Stability Control) indicator comes on to indicate that the ESC is not working properly, but it does not indicate a malfunction of the EPB.

**NOTICE**

- **If the EPB warning light is still on, have the system checked by an authorized HYUNDAI dealer.**
- **If the parking brake warning light does not illuminate or blinks even though the EPB switch was pulled up, the EPB may not be applied.**
- **If the parking brake warning light blinks when the EPB warning light is on, press the switch, then pull it up. Once more press it back to its original position and pull it back up. If the EPB warning does not go off, have the system checked by an authorized HYUNDAI dealer.**

### *Parking brake warning light*

Check the Parking Brake Warning Light by placing the POWER button to the ON position (do not start the vehicle).

This light will be illuminated when the parking brake is applied with the POWER button in the START or ON position.

Before driving, be sure the parking brake is released and the Brake Warning Light is OFF.

If the Parking Brake Warning Light remains on after the parking brake is released while the vehicle is in the ready ( ) mode, there may be a malfunction in the brake system. Immediate attention is necessary.

If at all possible, cease 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.

### *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.

**⚠ WARNING**

**Do not operate the parking brake while the vehicle is moving except in an emergency situation.**

**Information**

**During emergency braking by the EPB, the parking brake warning light will illuminate to indicate that the system is operating.**

**NOTICE**

**If you continuously notice a noise or burning smell when the EPB is used for emergency braking, have the system checked by an authorized HYUNDAI dealer.**

### When the EPB (Electronic Parking Brake) does not release

If the EPB does not release normally, contact an authorized HYUNDAI dealer by loading the vehicle on a flatbed tow truck and have the system checked.

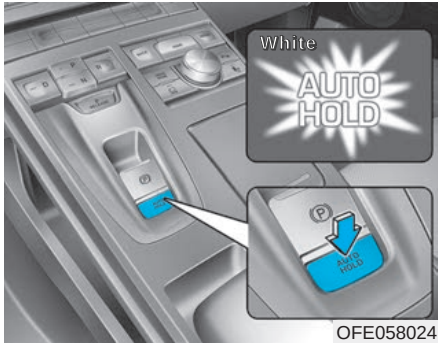
## Auto Hold

The 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.

### Information

**The Auto Hold On or Off setting is maintained when the vehicle is turned off. When the vehicle is restarted the last setting for Auto Hold is applied.**

### *Set up*



OFE058024

1. With the driver's door, liftgate and hood closed, depress the brake pedal and then press the [AUTO HOLD] switch. The white AUTO HOLD indicator will come on and the system will be in the standby position.

OFE058025

2. When you stop the vehicle completely by depressing the brake pedal, the AUTO HOLD indicator changes from white to green.
3. The vehicle will remain stationary even if you release the brake pedal.
4. If EPB is applied, Auto Hold will be released.

### Leaving

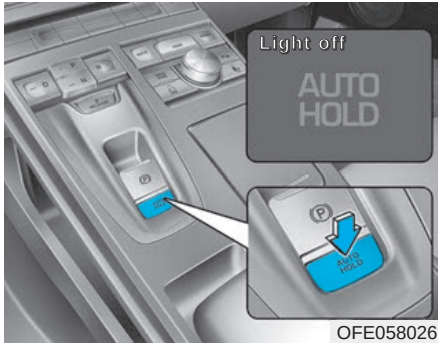
- If you press the accelerator pedal with the gear in D (Drive) or R (Reverse), the Auto Hold will be released automatically and the vehicle will start to move. The AUTO HOLD indicator changes from green to white.
- If the vehicle is restarted using the cruise control toggle switch (RES+ or SET-) while Auto Hold and cruise control is operating, the Auto Hold will be released regardless of accelerator pedal operation. The AUTO HOLD indicator changes from green to white. (if equipped with Smart Cruise Control system)

**⚠ WARNING**

**When driving off from Auto Hold by depressing the accelerator pedal, always check the surrounding area near your vehicle.**

**Slowly depress the accelerator pedal for a smooth start.**

### *Cancel*



OFE058026

To cancel the Auto Hold operation, press the [AUTO HOLD] switch. The AUTO HOLD indicator will turn off.

To cancel the Auto Hold operation when the vehicle is at a standstill, press the [AUTO HOLD] switch while depressing the brake pedal.

### Information

- The Auto Hold does not operate when:
  - Driver's door is opened
  - Liftgate is opened
  - Hood is opened
  - The gear is in P (Park)
  - The EPB is applied
- For your safety, the Auto Hold automatically switches to EPB in such cases:
  - Driver's door is opened
  - Liftgate is opened
  - Hood is opened
  - The vehicle is in a standstill for more than 10 minutes
  - The vehicle is standing on a steep slope
  - The vehicle moved several times

  In these cases, the parking brake warning light comes on, the AUTO HOLD indicator changes from green to white, and a warning sounds and a message will appear to inform you that EPB has been automatically engaged. Before driving again, depress the brake pedal, check the surrounding area near your vehicle and release the parking brake manually with the EPB switch.
- If the AUTO HOLD indicator lights up yellow, the Auto Hold not working properly. Contact an authorized HYUNDAI dealer.
- While operating Auto Hold, you may hear mechanical noise. However, it is normal operating noise.

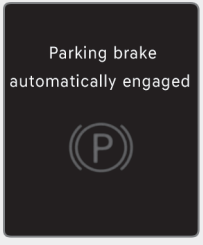
### WARNING

- Depress the accelerator pedal slowly when you start the vehicle.
- For your safety, cancel the Auto Hold when you drive downhill, back up the vehicle or park the vehicle.

### NOTICE

If there is a malfunction with the driver's door, liftgate or hood open detection system, the Auto Hold may not work properly. Contact an authorized HYUNDAI dealer.

### *Warning messages*




OIK060069L

**Parking brake automatically engaged**

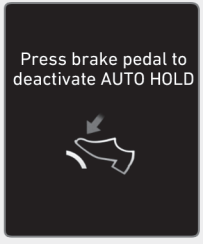
When the EPB is applied from Auto Hold, a warning will sound and a message will appear.

OIK060067L

**AUTO HOLD turning Off! Press brake pedal**

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

Depress the brake pedal when the above message appears for the Auto Hold and EPB may not activate.




OIK060071L

**Press brake pedal to deactivate AUTO HOLD**

If you did not apply the brake pedal when you release the Auto Hold by pressing the [AUTO HOLD] switch, a warning will sound and a message will appear.

OFE061037N

**AUTO HOLD conditions not met. Close door, Hood and liftgate**

When you press the [AUTO HOLD] switch, if the driver's door, hood and liftgate are not closed, a warning will sound and a message will appear on the cluster display.

Press the [AUTO HOLD] switch after closing the driver's door, hood and liftgate.

## Anti-lock Brake System (ABS)

**⚠ WARNING**

**An Anti-Lock Braking System (ABS) or an Electronic Stability Control (ESC) system will not prevent accidents 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. Vehicle speeds should always be reduced during extreme road conditions. The braking distance for cars equipped with ABS or ESC may be longer than for those without these systems in the following road conditions.**

**Drive your vehicle at reduced speeds during the following 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.**

**The safety features of an ABS or ESC equipped vehicle should not be tested by high speed driving or cornering. This could 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.

### *Using ABS*

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 which 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 it takes to stop the vehicle.

Always maintain a safe distance from the vehicle in front of you.

ABS will 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 anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.

The ABS warning light (ABS) will stay on for several seconds after the POWER button is in the ON position. During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on, you may have a problem with your ABS. Contact an authorized HYUNDAI dealer as soon as possible.

**⚠ WARNING**

**If the ABS warning light (ABS) is on and stays on, you may have a problem with the ABS. Your power brakes will work normally. To reduce the risk of serious injury or death, contact your 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, the ABS will be active continuously and the ABS warning light (ABS) may illuminate. Pull your car over to a safe place and turn the vehicle off.**

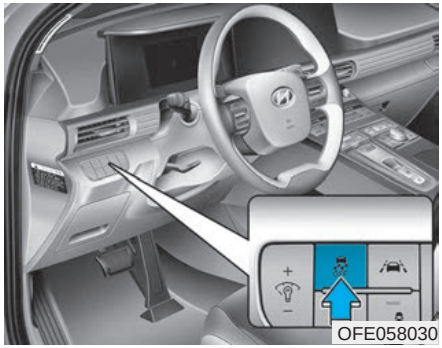
**Restart the vehicle. If the ABS warning light is off, then your ABS system is normal.**

**Otherwise, you may have a problem with your ABS system. Contact an authorized HYUNDAI dealer as soon as possible.**

### Information

**When you jump start your vehicle because of a drained battery, the ABS warning light (ABS) may turn on at the same time. This happens because of the low battery voltage. It does not mean your ABS is malfunctioning. Have the battery recharged before driving the vehicle.**

## Electronic Stability Control (ESC)




The Electronic Stability Control (ESC) system helps to 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 or too quickly when cornering. The ESC system will not prevent accidents.**

**Excessive speed in turns, abrupt maneuvers, and hydroplaning on wet surfaces can result in severe accidents.**

### *ESC operation*

#### ESC ON condition

When the POWER button is in the ON position, the ESC and the ESC OFF indicator lights illuminate for approximately three seconds. After both lights go off, the ESC is enabled.

#### When operating

When the ESC is in operation, the ESC indicator light blinks:

- When you apply your brakes under conditions which 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 ESC is active.
- When the ESC activates, the vehicle may not respond to the accelerator as it does under routine conditions.
- If the Smart Cruise Control was in use when the ESC activates, the Smart Cruise Control automatically disengages. The Smart Cruise Control can be reengaged when the road conditions allow. **See "Smart cruise control with stop & go system" later in this chapter.**

#### ESC OFF condition

To cancel ESC operation :

- State 1

OFE051031N

Press the ESC OFF button briefly. The ESC OFF indicator light and message "Traction Control disabled" will illuminate. In this state, the traction control function of ESC is disabled, but the brake control function of ESC still operates.

• State 2

OFE051032N

Press and hold the ESC OFF button continuously for more than 3 seconds. The ESC OFF indicator light and message "Traction & Stability Control disabled" illuminates and a warning chime sounds. In this state, both the traction control function of ESC and the brake control function of ESC are disabled.

If the POWER button is placed to the OFF position when ESC is off, ESC remains off. Upon restarting the vehicle, the ESC will automatically turn on again.

### *Indicator lights*

■ ESC indicator light (blinks)

■ ESC OFF indicator light (comes on)

When the POWER button is pressed to the ON position, the ESC indicator light illuminates, then goes off if the ESC system is operating normally.

The ESC indicator light blinks whenever the ESC is operating.

If the ESC indicator light stays on, your vehicle may have a malfunction with the ESC system. When this warning light illuminates, have the vehicle checked by an authorized HYUNDAI dealer as soon as possible.

The ESC OFF indicator light comes on when the ESC is turned off with the button.

**⚠ WARNING**

**When the ESC is blinking, this indicates the ESC is active:**

**Drive slowly and NEVER attempt to accelerate. NEVER turn the ESC off while the ESC indicator light is blinking or you may lose control of the vehicle resulting in an accident.**

***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 same size. Never drive the vehicle with different sized wheels and tires installed.**

### *ESC OFF usage*

#### 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 the ESC, to maintain wheel torque.

To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

**NOTICE**

- **Do not allow wheel(s) of one axle to spin excessively while the ESC, ABS, and parking brake warning lights are displayed. The repairs would not be covered by the vehicle warranty. Reduce vehicle power and do not spin the wheel(s) excessively while these lights are displayed.**
- **When operating the vehicle on a dynamometer, make sure the ESC is turned off (ESC OFF light illuminated).**

**Information**

**Turning the ESC off does not affect ABS or standard brake system operation.**

## Vehicle Stability Management (VSM)

The Vehicle Stability Management (VSM) is a function of the Electronic Stability Control (ESC) system. It helps ensure the vehicle stays stable when accelerating or braking suddenly on wet, slippery and rough roads where traction over the four tires can suddenly become uneven.

**WARNING**

**Take the following precautions when using the Vehicle Stability Management (VSM):**

- **ALWAYS check the speed and the distance to the vehicle ahead. The VSM is not a substitute for safe driving practices.**
- **Never drive too fast for the road conditions. The VSM system will not prevent accidents. Excessive speed in bad weather, slippery and uneven roads can result in severe accidents.**

### *VSM operation*

#### VSM ON condition

The VSM operates when:

- The Electronic Stability Control (ESC) is on.
- Vehicle speed is approximately above 9 mph (15 km/h) on curve roads.
- Vehicle speed is approximately above 18 mph (30 km/h) when the vehicle is braking on rough roads.

#### When operating

When you apply your brakes under conditions which may activate the 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.

**Information**

**The VSM does not operate when:**

- **Driving on a banked road such as a gradient or incline.**
- **Driving in reverse.**
- **The ESC OFF indicator light is on.**
- **The MDPS (Motor power steering) warning light ( ) is on or blinks.**

#### VSM OFF condition

To cancel VSM operation, press the ESC OFF button. ESC OFF indicator light ( ) will illuminate.

To turn on VSM, press the ESC OFF button again. The ESC OFF indicator light will go out.

**WARNING**

**If the ESC indicator light ( ) or MDPS warning light ( ) stays on or blinks, your vehicle may have a malfunction with the VSM system. When the warning light illuminates, have the vehicle checked by an authorized HYUNDAI dealer as soon as possible.**

**NOTICE**

**Driving with wheels and tires with different sizes may cause the VSM system to malfunction. Before replacing tires, make sure all four tires and wheels are the same size. Never drive the vehicle with different sized tires and wheels installed.**

## Hill-Start Assist Control (HAC)

The Hill-Start Assist Control (HAC) helps prevent the vehicle from rolling backwards when starting a vehicle from a stop on a hill. The system operates the brakes automatically for approximately 5 seconds and releases the brake after 5 seconds or when the accelerator pedal is depressed.

**⚠ WARNING**

**Always be ready to depress the accelerator pedal when starting off on a incline. The HAC activates only for approximately 5 seconds.**

### *i* Information

- **The HAC does not operate when the gear is in P (Park) or N (Neutral).**
- **The HAC activates even when the ESC (Electronic Stability Control) is off. However, it does not activate, when the ESC does not operate normally.**

## Good Braking Practices

**⚠ WARNING**

**Whenever leaving the vehicle or parking, always come to a complete stop and continue to depress the brake pedal. Shift to the P (Park) position, then apply the parking brake, and place the POWER button in the OFF position.**

**Vehicles parked with the parking brake 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.

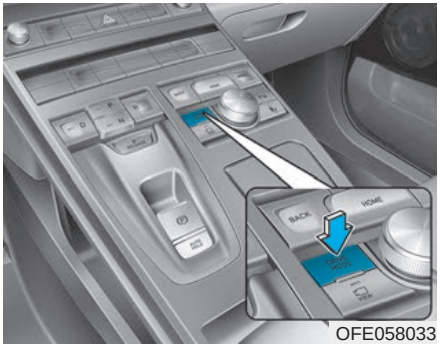
To dry the brakes, apply the brakes lightly until the braking action returns to normal. If the braking action does not return to normal, stop as soon as it is safe to do so and call an authorized HYUNDAI dealer for assistance.

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.

# DRIVE MODE INTEGRATED CONTROL SYSTEM (IF EQUIPPED)



OFE058033

The drive mode may be selected according to the driver's preference or road condition.

The system resets to be in the NORMAL mode (except if it is in ECO mode), when the vehicle is restarted.

### Information

**If there is a problem with the instrument cluster, the drive mode will be in NORMAL mode and may not change to ECO mode.**

The mode changes, as below, whenever the DRIVE MODE button is pressed.

NORMAL ⟷ ECO

- Press and hold the DRIVE MODE button to select ECO+ mode.

### *ECO mode*

ECO mode improves battery charge use efficiency for eco-friendly driving.

- When ECO mode is selected by pressing the DRIVE MODE button, the ECO indicator (green color) will illuminate.
- If the vehicle is set to ECO mode, when the vehicle is turned OFF and restarted the Drive Mode setting will remain in ECO mode.

### Information

**Battery charge use efficiency depends on the driver's driving habit and road condition.**

**When ECO mode is activated:**

- The acceleration response may be slightly reduced as the accelerator pedal is depressed moderately.
- The air conditioner performance may be limited.

The above situations are normal conditions when ECO mode is activated to improve fuel efficiency.

### *ECO+ mode*

ECO+ mode helps improve fuel efficiency with ultra power saving driving mode.

- When ECO+ mode is selected by pressing and holding the DRIVE MODE button, the ECO+ indicator will illuminate.
- Distance to empty may not change when the air conditioner/heater system is off. However, actual distance may be extended.
- Air conditioner/heater system turns off (except the defroster) but you may turn it on if necessary.
- When the drive mode is switched from the ECO+ mode to a different mode, it is changed to air conditioner/heater operation status of the ECO mode.
- Whenever the vehicle is restarted, the Drive Mode will reverse back to NORMAL mode.
- If ECO + mode is activated, the maximum vehicle speed is limited below 60 mph (100 km/h).

## Drive mode change alert

The driver can select the Drive mode change alert on the Infotainment system screen.

Go to "Vehicle settings → Drive mode → Drive mode change alert".

The information, which will be shown whenever the drive mode is changed.

[Detailed alert] : A change of the drive mode is shown by an image of the vehicle.

[Simple alert] : A change of the drive mode is indicated by a short message on top of the screen.

[No alert] : A change of the drive mode is not indicated.

## ECO mode climate control

ECO Mode Climate Control helps extend driving range by reducing the heating and cooling power of the climate control.

The driver can activate/deactivate the system on the Infotainment system screen.

Go to "Vehicle settings → Drive mode → Eco mode climate control".

# FORWARD COLLISION-AVOIDANCE ASSIST (FCA) (SENSOR FUSION)

Forward Collision-Avoidance Assist is designed to help detect and monitor the vehicle ahead or detect a pedestrian or cyclists in the roadway through radar signals and camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

**⚠ WARNING**

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

- **This function is only a supplemental system and it is not intended to, nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the sensors are limited. Pay attention to the road conditions at all times.**
- **NEVER drive too fast in accordance with the road conditions or while cornering.**
- **Always drive cautiously to prevent unexpected and sudden situations from occurring. Forward Collision-Avoidance Assist does not stop the vehicle completely and is not a collision avoidance function.**

## Forward Collision-Avoidance Assist setting and activation

### *Function setting*

- The driver can activate Forward Collision-Avoidance Assist by placing the power button to the ON position and by selecting:

  "Vehicle settings → Driver assistance → Forward safety"

  - If you select "Active assistance", Forward Collision-Avoidance Assist activates. Forward Collision-Avoidance Assist produces warning messages and warning alarms in accordance with the collision risk levels. Also, it controls the brakes in accordance with the collision risk levels.
  - If you select "Warning only", Forward Collision-Avoidance Assist activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because Forward Collision-Avoidance Assist do not control the brake.
  - If you select "Off", Forward Collision-Avoidance Assist deactivates,

The warning light illuminates on the cluster display, when you cancel Forward Collision-Avoidance Assist. The driver can monitor the Forward Collision-Avoidance Assist ON/OFF status on the infotainment system screen. Also, the warning light illuminates when the ESC (Electronic Stability Control) is turned off. If the warning light remains ON when Forward Collision-Avoidance Assist is activated, we recommend that you have the function checked by an authorized HYUNDAI dealer.

- The driver can select the initial warning activation time on the infotainment system screen.

  Go to the "Vehicle settings → Driver assistance → Warning timing → Normal/Later"

The options for the initial Forward Collision Warning includes the following:

- Normal:

  When this condition is selected, the initial Forward Collision Warning is activated sensitively. If you feel the warning activates too early, set the Forward Collision Warning to 'Later'.

  Even though, 'Normal' is selected if the front vehicle suddenly stops the initial warning activation time may not seem fast.

- Later:

  When this condition is selected, the initial Forward Collision Warning is activated later than normal. This setting reduces the amount of distance between the vehicle, pedestrian or cyclist (if equipped) ahead before the initial warning occurs.

  Select 'Later' when traffic is light and when driving speed is slow.

❊ if you change the warning timing, the warning timing of other functions may change.

Always be aware of warning timing before changing the warning timing.

### *Prerequisite for activation*

Forward Collision-Avoidance Assist gets ready to be activated, when Forward Collision-Avoidance Assist is selected on the infotainment system vehicle settings, and when the following prerequisites are satisfied.

- The ESC (Electronic Stability Control) is on.
- Vehicle speed is over 5 mph (8 km/h). (Forward Collision-Avoidance Assist is only activated within a certain speed range.)
- The function detects a pedestrian, cyclist (if equipped) or a vehicle in front, which may collide with your vehicle. (Forward Collision-Avoidance Assist may not be activated or may sound a warning alarm in accordance with the driving situation or vehicle condition. If you select "Warning only", Forward Collision-Avoidance Assist activates and produces only warning alarms in accordance with the collision risk levels.)

❊ Forward Collision-Avoidance Assist may not operate properly according to the frontal situation, the direction of pedestrian or cyclist (if equipped) and speed.

**⚠ WARNING**

- **Completely stop the vehicle on a safe location before operating the switch on the steering wheel to activate/deactivate Forward Collision-Avoidance Assist.**
- **Forward Collision-Avoidance Assist automatically activates upon placing the power button to the ON position. The driver can deactivate Forward Collision-Avoidance Assist by canceling the function setting on the infotainment system screen.**
- **Forward Collision-Avoidance Assist automatically deactivates upon canceling the ESC (Electronic Stability Control). When the ESC is canceled, Forward Collision-Avoidance Assist cannot be activated on the infotainment system screen. Forward Collision-Avoidance Assist warning light will illuminate which is normal.**

## Forward Collision-Avoidance Assist warning message and function control

Forward Collision-Avoidance Assist produces warning messages and warning alarms in accordance with the collision risk levels, such as abrupt stopping of the vehicle in front, insufficient braking distance, pedestrian or cyclist (if equipped) detection. Also, it controls the brakes in accordance with the collision risk levels.

The driver can select the initial warning activation time in the Vehicle settings in the infotainment system screen. The options for the initial Forward Collision Warning include Normal or Late initial warning time.

If you select "Warning only", Forward Collision-Avoidance Assist activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because Forward Collision-Avoidance Assist do not control the brake.

### *Collision Warning*

■ Type A

OFE058144L

■ Type B

OFE050035L

This warning message appears on the cluster display with a warning chime. Additionally, some vehicle system intervention occurs by the driving management system to help decelerate the vehicle.

- Your vehicle speed may decelerate moderately.
- Forward Collision-Avoidance Assist limitedly controls the brakes to preemptively mitigate impact in a collision.
- If you select "Warning only", Forward Collision-Avoidance Assist activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because Forward Collision-Avoidance Assist do not control the brake.

### *Emergency braking*

■ Type A

OFE058145L

■ Type B

OFE050036L

This warning message appears on the cluster display with a warning chime.

Additionally, some vehicle system intervention occurs by the driving management system to help decelerate the vehicle.

- Forward Collision-Avoidance Assist limitedly controls the brakes to preemptively mitigate impact in a collision. The brake control is maximized just before a collision.
- If you select "Warning only", Forward Collision-Avoidance Assist activates and produces only warning alarms in accordance with the collision risk levels. You should control the brake directly because the Forward Collision-Avoidance Assist do not control the brake.

### *Brake operation*

- In an urgent situation, the braking system enters into the ready status for prompt reaction against the driver's depressing the brake pedal.
- Forward Collision-Avoidance Assist provides additional braking power for optimum braking performance, when the driver depresses the brake pedal.
- The braking control is automatically deactivated, when the driver sharply depresses the accelerator pedal, or when the driver abruptly operates the steering wheel.
- Forward Collision-Avoidance Assist brake control is automatically canceled, when risk factors disappear.

**⚠ CAUTION**

**The driver should always use extreme caution while operating the vehicle, whether or not there is a warning message or alarm from Forward Collision-Avoidance Assist.**

**⚠ WARNING**

**The braking control cannot completely stop the vehicle nor avoid all collisions. The driver should hold the responsibility to safely drive and control the vehicle.**

**⚠ WARNING**

**Forward Collision-Avoidance Assist logic operates within certain parameters, such as the distance from the vehicle, pedestrian or cyclist (if equipped) ahead, the speed of the vehicle ahead, and the driver's vehicle speed. Certain conditions such as inclement weather and road conditions may affect the operation of Forward Collision-Avoidance Assist.**

**⚠ WARNING**

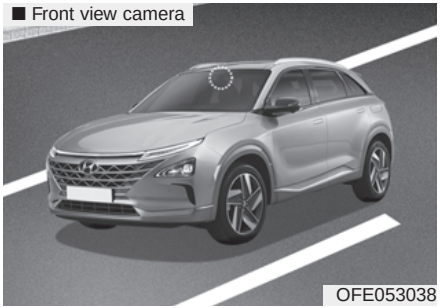
**Never deliberately drive dangerously to activate the system.**

## Detecting sensor

■ Front radar

OFE058106

■ Front view camera



OFE053038

In order for Forward Collision-Avoidance Assist to operate properly, always make sure the sensor cover or sensor is clean and free of dirt, snow, and debris.

Dirt, snow, or foreign substances on the lens may adversely affect the sensing performance of the sensor.

**NOTICE**

- **Do not apply license plate molding or foreign objects such as a bumper sticker or a bumper guard near the radar sensor. Doing so may adversely affect the sensing performance of the radar.**
- **Always keep the radar sensor and cover clean and free of dirt and debris.**
- **Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.**
- **Do not place any objects near the front windshield or install any accessories on the front windshield. It can affect the performance of the defogging and defrosting function of the climate control system, which may prevent the Driver Assistance functions from operating**
- **Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, Forward Collision-Avoidance Assist may not operate correctly. In this case, a warning message may not be displayed. We recommend that you have the vehicle inspected by authorized HYUNDAI dealer.**
- **If the front bumper becomes damaged in the area around the radar sensor, Forward Collision-Avoidance Assist may not operate properly. We recommend that you have the vehicle inspected by authorized HYUNDAI dealer.**
- **Use only genuine parts or the equivalent specified for your vehicle to repair or replace a damaged sensor or sensor cover. Do not apply paint to the sensor cover.**

**NOTICE**

- **NEVER install any accessories or stickers on the front windshield, nor tint the front windshield.**
- **NEVER locate any reflective objects (for example, white paper, mirror) over the dashboard. Any light reflection may cause a malfunction of the function.**
- **Pay extreme caution to keep the camera out of water.**
- **NEVER disassemble the camera assembly, nor apply any impact on the camera assembly.**
- **Playing the vehicle audio system at high volume may offset the warning sounds.**

## Information

**We recommend that you have the function checked by an authorized HYUNDAI dealer when:**

- **The windshield glass is replaced.**
- **The radar sensor or cover gets damaged or replaced.**

### *Warning message and warning light*

■ Type A

OFE058146L

■ Type B

OTM070095N

### Forward Collision Avoidance Assist (FCA) system disabled. Radar blocked

When the sensor cover is blocked with dirt, snow, or debris, Forward Collision-Avoidance Assist operation may stop temporarily. If this occurs, a warning message will appear on the cluster display.

Remove any dirt, snow, or debris and clean the radar sensor cover before operating Forward Collision-Avoidance Assist.

The function will operate normally when such dirt, snow or debris is removed.

Forward Collision-Avoidance Assist may not properly operate in an area (for example, open terrain), where any substances are not detected after turning on the vehicle.

**⚠ WARNING**

**Forward Collision-Avoidance Assist may not activate according to the road conditions, inclement weather, driving conditions or traffic conditions.**

■ Type A

OFE058147L

■ Type B

OTM070093N

**Forward Collision-Avoidance Assist (FCA) system disabled. Camera obscured**

When the camera is blocked with dirt, snow, or debris, Forward Collision-Avoidance Assist operation may stop temporarily. If this occurs, a warning message will appear on the cluster display.

Remove any dirt, snow, or debris and clean the front camera before operating Forward Collision-Avoidance Assist.

The function will operate normally when such dirt, snow or debris is removed.

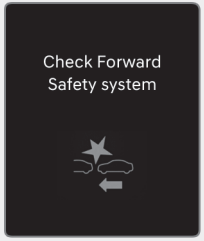
Forward Collision-Avoidance Assist may not properly operate in an area (e.g. open terrain), where any substances are not detected after turning ON the vehicle.

## Forward Collision-Avoidance Assist malfunction

■ Type A

OFE058148L

■ Type B




OTM070094N

### Check Forward Collision Avoidance Assist system

- When Forward Collision-Avoidance Assist is not working properly, Forward Collision-Avoidance Assist warning light (⚠) will illuminate and the warning message will appear for a few seconds. After the message disappears, the master warning light (⚠) will illuminate. In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.
- Forward Collision-Avoidance Assist warning message may appear along with the illumination of the ESC (Electronic Stability Control) warning light.

**⚠ WARNING**

- **Forward Collision-Avoidance Assist is only a supplemental system for the driver's convenience. The driver should hold the responsibility to control the vehicle operation. Do not solely depend on**

  **Forward Collision-Avoidance Assist. Rather, maintain a safe braking distance, and, if necessary, depress the brake pedal to reduce the driving speed.**
- **In certain instances and under certain driving conditions, Forward Collision-Avoidance Assist may activate unintentionally. This initial warning message appears on the cluster display with a warning chime.**

  **Also, in certain instances the front radar sensor or camera recognition system may not detect the vehicle, pedestrian or cyclist (if equipped) ahead. Forward Collision-Avoidance Assist may not activate and the warning message will not be displayed.**
- **Even if there is any problem with the brake control function of Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate normally. However, brake control function for avoiding collision will not activate.**
- **If the vehicle in front stops suddenly, you may have less control of the brake system. Therefore, always keep a safe distance between your vehicle and the vehicle in front of you.**
- **Forward Collision-Avoidance Assist may activate during braking and the vehicle may stop suddenly shifting loose objects toward the passengers. Always keep loose objects secured.**
- **Forward Collision-Avoidance Assist may not activate if the driver applies the brake pedal to avoid a collision.**

- **The brake control may not work, possibly causing a collision, if a vehicle in front abruptly stops. Always pay extreme caution.**
- **Occupants may get injured, if the vehicle abruptly stops by activated Forward Collision-Avoidance Assist. Pay extreme caution.**
- **Forward Collision-Avoidance Assist operates only to detect vehicles, pedestrian or cyclist (if equipped) in front of the vehicle.**

**⚠ WARNING**

- **Forward Collision-Avoidance Assist does not operate when the vehicle is in reverse.**
- **Forward Collision-Avoidance Assist is not designed to detect other objects on the road such as animals.**
- **Forward Collision-Avoidance Assist does not detect vehicles in the opposite lane.**
- **Forward Collision-Avoidance Assist does not detect cross traffic vehicles that are approaching.**
- **Forward Collision-Avoidance Assist cannot detect the driver approaching the side view of a parked vehicle (for example on a dead end street.)**
- **Forward Collision-Avoidance Assist cannot detect the cross traffic cyclist that are approaching.**

**In these cases, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce the driving speed in order to maintain a safe distance.**

## Limitations of Forward Collision-Avoidance Assist

Forward Collision-Avoidance Assist is designed to monitor the vehicle ahead or a pedestrian or cyclist (if equipped) in the roadway through radar signals and camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

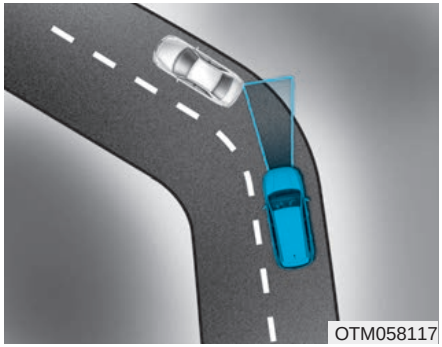
In certain situations, the radar sensor or the camera may not be able to detect the vehicle, pedestrian or cyclist (if equipped) ahead. In these cases, Forward Collision-Avoidance Assist may not operate normally. The driver must pay careful attention in the following situations where Forward Collision-Avoidance Assist operation may be limited.

### *Detecting vehicles*

The sensor may be limited when:

- The radar sensor or camera is blocked with a foreign object or debris
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or stuck of foreign matter (sticker, bug, etc.) on the glass
- Inclement weather such as heavy rain or snow obscures the field of view of the radar sensor or camera
- There is interference by electromagnetic waves
- There is severe irregular reflection from the radar sensor
- The radar/camera sensor recognition is limited
- The vehicle in front is too small to be detected (for example a motorcycle etc.)
- The vehicle in front is an oversize vehicle or trailer that is too big to be detected by the camera recognition system (for example a tractor trailer, etc.)
- The camera's field of view is not well illuminated (either too dark or too much reflection or too much backlight that obscures the field of view)
- The vehicle in front does not have their rear lights or their rear lights does not turned ON or their rear lights are located unusually.
- The outside brightness changes suddenly, for example when entering or exiting a tunnel
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road
- The field of view in front is obstructed by sun glare or head light of oncoming vehicle.
- The windshield glass is fogged up; a clear view of the road is obstructed
- The vehicle in front is driving erratically
- The vehicle is on unpaved or uneven rough surfaces, or road with sudden gradient changes.
- The vehicle is driven near areas containing metal substances as a construction zone, railroad, etc.
- The vehicle drives inside a building, such as a basement parking lot
- The camera does not recognize the entire vehicle in front.
- The camera is damaged.
- The brightness outside is too low such as when the headlights are not on at night or the vehicle is going through a tunnel.
- The shadow is on the road by a median strip, trees, etc.
- The vehicle drives through a tollgate.
- The windshield glass is fogged up; a clear view of the road is obstructed.
- The rear part of the vehicle in front is not normally visible. (the vehicle turns in other direction or the vehicle is overturned.)
- The adverse road conditions cause excessive vehicle vibrations while driving

- The sensor recognition changes suddenly when passing over a speed bump
- The vehicle in front is moving vertically to the driving direction
- The vehicle in front is stopped vertically
- The vehicle in front is driving towards your vehicle or reversing
- You are on a roundabout and the vehicle in front circles



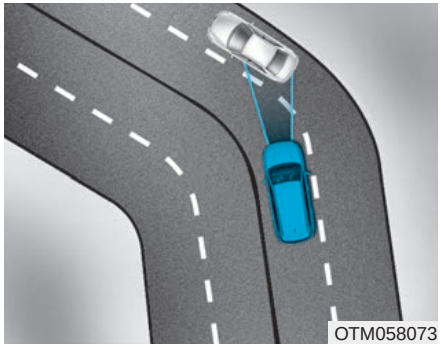

- Driving on a curve

The performance of Forward Collision-Avoidance Assist may be limited when driving on a curved road.

The front camera or radar sensor recognition system may not detect the vehicle, pedestrian or cyclist traveling in front on a curved road.

This may result in no alarm and braking when necessary.

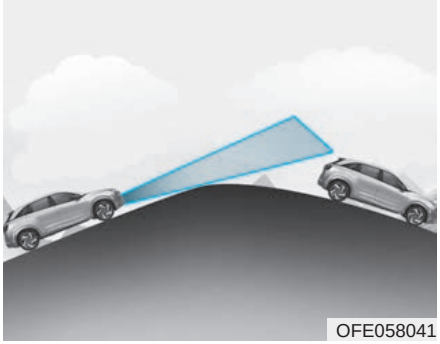
Always pay attention to road and driving conditions, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.




Forward Collision-Avoidance Assist may recognize a vehicle or pedestrian or cyclist in the next lane or outside the lane when driving on a curved road.

If this occurs, the function may unnecessarily alarm the driver and apply the brake.

Always pay attention to road and driving conditions, while driving.


OFE058041

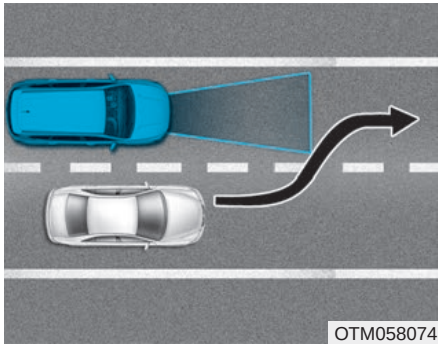
- Driving on a slope

The performance of Forward Collision-Avoidance Assist may be decreased while driving upward or downward on a slope. The front camera or front radar sensor recognition may not detect the vehicle, pedestrian or cyclist in front.

This may result in unnecessary alarm and braking or no alarm and braking when necessary.

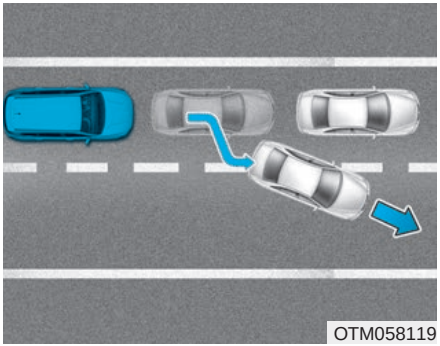
When the function suddenly recognizes the vehicle, pedestrian or cyclist in front while passing over a slope, you may experience sharp deceleration.

Always keep your eyes forward while driving upward or downward on a slope, and, if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.

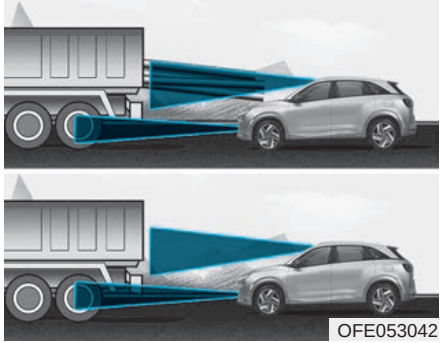

OTM058074

- Changing lanes

When a vehicle changes lanes in front of you, Forward Collision-Avoidance Assist may not immediately detect the vehicle, especially if 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.


OTM058119

When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, Forward Collision-Avoidance Assist may not immediately detect the new vehicle that is now in front of you. 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.


OFE053042

- Detecting the vehicle in front of you

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

### *Detecting pedestrians or cyclists*

The sensor may be limited when:

- The pedestrian or cyclist is not fully detected by the camera recognition system, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian or cyclist is moving very quickly or appears abruptly in the camera detection area
- The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to be detected by the camera recognition system
- The outside lighting is too bright (for example, when driving in bright sunlight or in sun glare) or too dark (for example, when driving on a dark rural road at night)
- It is difficult to detect and distinguish the pedestrian or cyclist from other objects in the surroundings, for example, when there is a group of pedestrians, cyclists or a large crowd

- There is an item similar to a person's body structure
- The pedestrian or cyclist is small
- The pedestrian has impaired mobility
- The sensor recognition is limited
- The radar sensor or camera is blocked with a foreign object or debris
- Inclement weather such as heavy rain or snow obscures the field of view of the radar sensor or camera
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road
- The field of view in front is obstructed by sun glare
- The windshield glass is fogged up; a clear view of the road is obstructed
- The adverse road conditions cause excessive vehicle vibrations while driving
- When the pedestrian or cyclist suddenly interrupts in front of the vehicle
- When the cyclist in front is riding intersected with the driving direction
- When there is any other electromagnetic interference
- When the construction area, rail or other metal object is near the cyclist
- If the bicycle material is not reflected well on the radar

### Information

**This device complies with Part 15 of the FCC rules.**

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

1. **This device may not cause harmful interference.**
2. **This device must accept any interference received, including interference that may cause undesired operation.**

### WARNING

- **Do not use Forward Collision-Avoidance Assist when towing a vehicle.**

  **Application of Forward Collision-Avoidance Assist while towing may adversely affect the safety of your vehicle or the towing vehicle.**
- **Use extreme caution when 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.**
- **Forward Collision-Avoidance Assist may operate when an object, which has similar shape or characteristic to a vehicle, pedestrian or cyclist, is detected.**

- **Forward Collision-Avoidance Assist is designed to detect and monitor the vehicle ahead or detect a pedestrian or cyclist (if equipped) in the roadway through radar signals and camera recognition. It is not designed to detect bicycles, motorcycles, or smaller wheeled objects such as luggage bags, shopping carts, or strollers.**
- **Never try to test the operation of Forward Collision-Avoidance Assist. Doing so may cause severe injury or death.**
- **If the front bumper, front glass, radar or camera have been replaced or repaired, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.**

### Information

**In some instances, Forward Collision-Avoidance Assist may be cancelled when subjected to electromagnetic interference.**

## Lane-Change oncoming function

The Lane-Change Oncoming function detects the oncoming vehicle with a front view camera at the front windshield. And it assists the driver's steering to help avoiding the collision to oncoming vehicle and keeping the vehicle in the lanes, when the vehicle drives over the centerline.

### WARNING

- **This function is only a supplemental system. So, it does not replace the need for extreme care and attention of the driver. The sensing range of oncoming vehicle is limited. Pay attention to the road conditions at all times.**
- **Always drive cautiously to prevent accidents from any unexpected and sudden situations. The function does not steer the vehicle completely and is not a collision avoidance system.**

## Warning message and function control

■ Type A

OFE058187L

■ Type B

OFE050458L

- With Forward Collision-Avoidance Assist in activation, the warning message "Emergency Steering" appears on the cluster display with an audible warning when:
  - The vehicle speed is over 38 mph (60 km/h) and the vehicle crosses the centerline when an oncoming vehicle approaches.
- Additionally, provides steering assist to return vehicle back into lanes.

### Information

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

### WARNING

- **The steering control can not completely avoid the collision to oncomimg vehicle. Driver is reponsible for being aware of surroundings and steering the vehicle for safe driving practices.**
- **The function operated within certain conditions, such as the distance and speed from the oncoming vehicle, the driver's vehicle speed, etc.**

  **The function can be cancelled or not work properly according to road condition and surroundings.**

  **Always be cautious when driving.**
- **Never drive deliberately and dangerously to activate the function.**

## Limitations of the function

- Refer to ‘Lane Keeping Assist (LKA)’ in this chapter.
- Refer to ‘Forward Collision-Avoidance Assist (FCA)’ in this chapter.

## LANE KEEPING ASSIST (LKA)

Lane Keeping Assist with a camera at the front windshield, helps detect lane markers and road edge on the road, and assists the driver's steering to help keep the vehicle between lanes.

When Lane Keeping Assist detects the vehicle straying from its lane (or road), it alerts the driver with a visual and audible warning, while applying a counter-steering torque, trying to prevent the vehicle from moving out of its lane (or road).

**⚠ WARNING**

**Lane Keeping Assist is not a substitute for safe driving practices, but a convenience function. It is the responsibility of the driver to always be aware of the surrounding and steer the vehicle.**

**⚠ WARNING**

**Take the following precautions when using Lane Keeping Assist:**

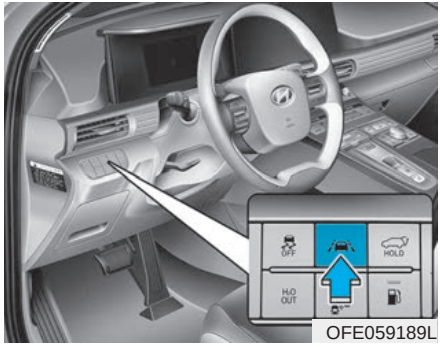
- **Do not steer the steering wheel suddenly when the steering wheel is being assisted by the function.**
- **Lane Keeping Assist helps to prevent the driver from moving out of the lane (or road) unintentionally by assisting the driver's steering. However, the driver should not solely rely on the function but always pay attention on the steering wheel to stay in the lane.**
- **The operation of Lane Keeping Assist can be canceled or not work properly according to road condition and surroundings. Always be cautious when driving.**
- **Do not disassemble Lane Keeping Assist camera temporarily to tint the window or attach any types of coatings and accessories. If you disassemble the camera and assemble it again, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the function checked for calibration.**
- **When you replace the windshield glass, Lane Keeping Assist camera or related parts of the steering wheel, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the function checked for calibration.**

- **The function detects lane markers (or road edge) and controls the steering wheel by a camera, therefore, if the lane markers (or road edge) are hard to detect, the function may not work properly.**

  **Please refer to "Limitations of Lane Keeping Assist".**
- **Do not remove or damage the related parts of Lane Keeping Assist.**
- **You may not hear a warning sound of Lane Keeping Assist because of excessive audio sound.**
- **Do not place objects on the dashboard that reflects light such as mirrors, white paper, etc. The function may mal-function if the sunlight is reflected.**

- **Always have your hands on the steering wheel while Lane Keeping Assist is activated. If you continue to drive with your hands off the steering wheel after the "Keep hands on steering wheel" warning message appears, the function will stop control the steering wheel.**
- **The steering wheel is not continuously controlled so if the vehicle speed is at a higher rate when leaving a lane (or road edge) the vehicle may not be controlled by the function. The driver must always follow the speed limit when using the function.**
- **If you attach objects to the steering wheel, the function may not assist steering or the hands off alarm may not work properly.**
- **When you tow a trailer, make sure that you turn off Lane Keeping Assist.**

## Lane Keeping Assist operation



OFE059189L

To activate/deactivate the Lane Keeping Assist:

With the power button in the ON position, Lane Keeping Assist turns on automatically. The indicator in the cluster display will initially illuminate white. If you press the Lane Safety button located on the instrument panel on the lower left hand side of the driver, Lane Keeping Assist will be turned off and the indicator on the cluster display will go off.

The color of indicator will change depending on the condition of Lane Keeping Assist.

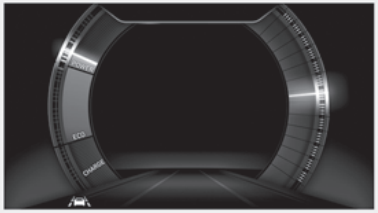
- White : Sensor does not detect the lane marker or vehicle speed is less than 40 mph (64 km/h).
- Green : Sensor detects the lane marker (or road edge) and system is able to control the steering.

## Information

- **Lane Keeping Assist automatically activates upon placing the switch button to the ON position. The switch indicator will be on and the indicator in the cluster display will initially illuminate white. The driver can deactivate Lane Keeping Assist by pushing Lane Safety button located on the instrument panel on the left hand side of the steering wheel or LDW selecting from the vehicle Settings Mode on the infotainment system screen.**
- **The images and colors in the instrument cluster may differ depending on the cluster type or theme selected from the instrument cluster.**

### *Lane Keeping Assist activation*

■ Type A



OFE058090

■ Type B

OFE050193

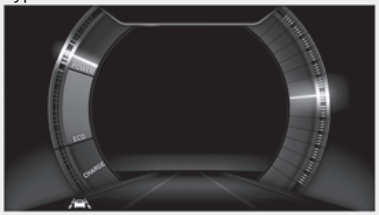
- After Lane Keeping Assist is activated, if lane marker (or road edge) is detected, vehicle speed is over 40 mph (64 km/h) and all the activation conditions are satisfied, Lane Keeping Assist indicator will change to green and the steering wheel will be controlled.

## ⚠ WARNING

**Lane Keeping Assist is a function to prevent the driver from leaving the lane (or road edge). However, the driver should not solely rely on the function but always check the road conditions when driving.**

■ Lane marker undetected

• Type A



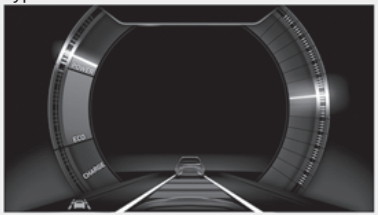
OFE058090

• Type B

OFE050193

■ Lane marker detected

• Type A



OFE058126

• Type B

OFE050126

- If vehicle speed is over 40 mph (64 km/h) and the function detects lane markers, the color changes from gray to white.
- If the function detects the left lane marker, the left lane marker color will change from gray to white.
- If the function detects the right lane marker, the right lane marker color will change from gray to white.
- If your vehicle speed exceeds 40 mph (64 km/h) and the Lane Safety button is ON, the function is enabled. If your vehicle departs from the projected lane in front of you, Lane Keeping Assist operates as follows:

■ Left lane crossing warning

• Type A

OFE058091

• Type B

OFE050091

A

■ Right lane crossing warning

• Type A

OFE058092

• Type B

OFE050092

■ Lane Keeping Assist is enabled

• Type A

OFE058093

• Type B

OFE050092

visual warning appears on the cluster display. Either the left lane marker or the right lane marker in the cluster display will blink depending on which direction the vehicle is veering.

- Lane Keeping Assist will control the vehicle's steering to prevent the vehicle from crossing the lane maker in below conditions.
  - Vehicle speed is over 40 mph (64 km/h)
  - The function detects lanes (or road edges)

- When driving, the vehicle is located between both lanes normally.
- The steering wheel is not turned suddenly.

When lanes (or road edges) are detected and all the conditions to activate Lane Keeping Assist are satisfied, a Lane Keeping Assist indicator light will change from white to green. This indicates that Lane Keeping Assist is in the ENABLED state and the steering wheel will be able to be controlled.

■ Left lane veering

• Type A

OFE058091

• Type B

OFE050091

■ Right lane veering

• Type A

OFE058092

• Type B

OFE050092

If the vehicle leaves the lane while Lane Keeping Assist is operating due to lack of steering force, either left or right lane marker in cluster display will blink.

■ Type A

OFE058155L

■ Type B

OFE050439L

### Keep hands on steering wheel

If the driver takes their hands off the steering wheel for several seconds while Lane Keeping Assist is activated, the function will warn the driver.

### Information

**If the steering wheel is held very lightly the message may still appear because Lane Keeping Assist may not recognize that the driver has their hands on the wheel.**

### WARNING

**The warning message may appear late according to road conditions. Therefore, always have your hands on the steering wheel while driving.**

### WARNING

- **The driver is responsible for accurate steering.**
- **Turn off the function and drive the vehicle in following situations.**
  - **In bad weather**
  - **In bad road condition**
  - **When the steering wheel needs to be controlled by the driver frequently.**

### Information

- **Even though the steering is assisted by the function, the driver may control the steering wheel.**
- **The steering wheel may feel heavier when the steering wheel is assisted by the function than when it is not.**

***The function will be cancelled when:***

- You change lanes with the turn signal.
  - Using the turn signal to change lanes.
  - If you change lanes without the turn signal on, the steering wheel might be controlled.
- Lane Keeping Assist can transit to steering assist mode when the car is near to middle of the lane after system on or the lane was changed. Lane Keeping Assist can not assist steering if the vehicle follows lane marker too close continuously before transition to steering assist mode.
- The control of ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
- The steering will not be assisted when your drive fast on a sharp curve.
- The steering will not be assisted when vehicle speed is below 35 mph (56 km/h) and over 110 mph (177 km/h).
- The steering will not be assisted when you change lanes(or road edge) fast.
- The steering will not be assisted when you brake suddenly.
- The steering will not be assisted when the lane(or road width) is very wide or narrow.
- There are more than two lane markers such as a construction area.
- Radius of a curve is too small.
- When you turn steering wheel suddenly, Lane Keeping Assist will be disabled temporarily.
- Driving on a steep slope or hill.

## Driver's attention

The driver must be cautious in the below situations may not work properly when recognition of the lane marker is poor or limited :

***When lane and road condition is poor***

- It is difficult to distinguish the lane marker (or road edge) from road when the lane marker (or road edge) is covered with dust or sand.
- It is difficult to distinguish the color of the lane marker from road.
- There is something looks like a lane marker.
- The lane marker (or road edge) is indistinct or damaged.
- The number of lanes increases/decreases or the lane lines are crossing (Driving through a toll plaza/toll gate, merged/divided lane).
- There are more than two lane markers.
- The lane marker is very thick or thin.

- The number of lanes change or the lanes merge
- The lane marker (or road edge) is not visible due to snow, rain, stain, a puddle or other factors.
- A shadow is on the lane marker (or road edge) because of a median strip, guardrail, noise barriers and others.
- When the lane markers are complicated or a structure substitutes for the lines such as a construction area.
- There are crosswalk signs or other symbols on the road.
- The lane suddenly disappears such as at the intersection.
- The lane marker (or road edge) in a tunnel is covered with dirt or oil and etc.
- The lane (or road width) is very wide or narrow.

***When external condition is intervened***

- The brightness of outside changes suddenly when entering/existing a tunnel or passing under a bridge.
- The headlights are not on at night or in a tunnel, or light level is low.
- There is a boundary structure in the roadway.
- The light of street, sun, oncoming vehicle and so on reflects from the water on the road.
- When light shines brightly in the reverse direction you drive.
- Road surface is not evenness.
- The distance from the vehicle ahead is very short or the vehicle ahead drives hiding the lane line(or road edge).
- You drive on a steep grade or a sharp curve.
- The vehicle vibrates heavily.
- The temperature near inside mirror is very high due to direct sun light and etc.

**⚠ WARNING**

**Lane Keeping Assist is a function to help prevent the driver from leaving the lane(or road edge). However, the driver should not solely rely on the function but always take the necessary actions for safe driving practices.**

## Warning light and message

### *Check Lane Keeping Assist*

If there is a problem with the function a message will appear for a few seconds. If the problem continues the Lane Keeping Assist failure indicator will illuminate.

### *Lane Keeping Assist failure indicator*

Lane Keeping Assist failure indicator (yellow) will illuminate if Lane Keeping Assist is not working properly. Have the function checked by an authorized HYUNDAI dealer.

## Lane Keeping Assist function change

The driver can change Lane Keeping Assist to the Lane Departure Warning system or change the Lane Keeping Assist mode from the infotainment system screen. Go to the "Vehicle settings → Driver Assistance → Lane Safety → Lane Keeping Assist (LKA)/Lane Departure Warning (LDW)/Off".

The function is automatically set to Lane Keeping Assist if a function is not selected.

### *Lane Keeping Assist*

This mode guides the driver to help keep the vehicle within the lanes. It rarely controls the steering wheel, when the vehicle drives well inside the lanes. However, it starts to control the steering wheel, when the vehicle is about to deviate out of the lane.

### *Lane Departure Warning*

Lane Departure Warning alerts the driver with a visual warning and a warning alarm when the function detects the vehicle departing the lane. The steering wheel will not be controlled.

### *Off*

If you select "Off", Lane Keeping Assist is deactivated.

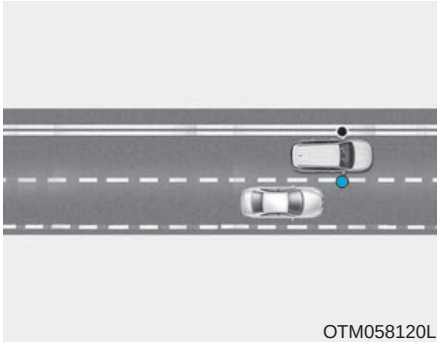
# BLIND-SPOT COLLISION-AVOIDANCE ASSIST (BCA)

## Blind-Spot Collision-Avoidance Assist description

### *Collision Warning*

The Blind-Spot Collision Warning uses radar sensors in the rear bumper to monitor and warn the driver of an approaching vehicle in the driver's blind spot area.

1) Blind-Spot Area

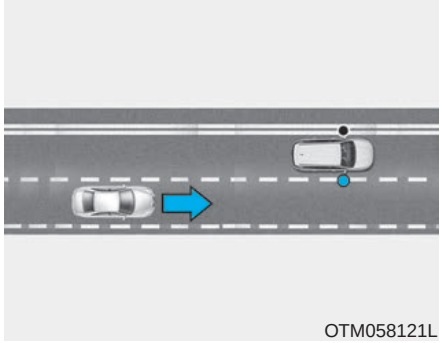


OTM058120L

The blind spot detection range varies relative to vehicle speed.

Note that if your vehicle is traveling much faster than the vehicles around you, the warning will not occur.

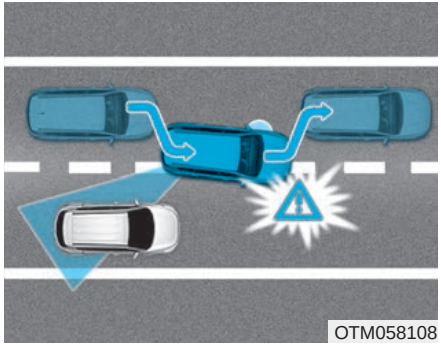
2) Closing at high speed



OTM058121L

Blind-Spot Collision Warning will alert you when a vehicle is approaching in an adjacent lane at a high rate of speed. If the driver activates the turn signal when the function detects an oncoming vehicle, the function sounds an audible alert.

### *Collision-Avoidance Assist*



OTM058108

Blind-Spot Collision-Avoidance Assist detects the front lane through the camera installed on the upper front windshield and detects the side/rear areas through radar sensors.

Blind-Spot Collision-Avoidance Assist may activate the Electronic Stability Control (ESC) in accordance with a colliding possibility with an approaching vehicle while changing lanes. It is to lower the colliding risk or mitigate the colliding damage.

**⚠ WARNING**

- **Always be aware of road conditions while driving and be alert for unexpected situations even though Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist are operating.**
- **The Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist are supplemental function to assist you. Do not entirely rely on the functions. Always pay attention, while driving, for your safety.**
- **Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist are not substitutes for proper and safe driving.**

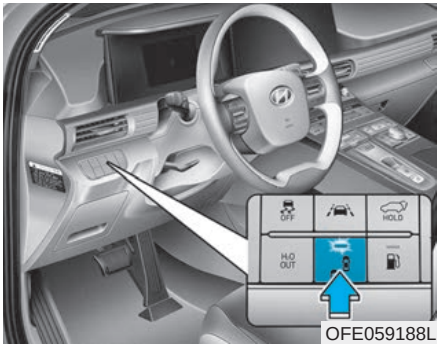
  **Always drive safely and use caution when changing lanes or backing up the vehicle.**

**Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist may not detect every object alongside the vehicle.**

## Blind-Spot Collision-Avoidance Assist setting and activation

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

- The driver can activate the function by placing the POWER button to the ON position and by selecting “Vehicle settings → Driver assistance → Blind-spot safety” on infotainment system screen.
  - Blind-Spot Collision-Avoidance Assist turns on and gets ready to be activated when 'Active assistance' is selected. Then, if a vehicle approaches the driver's blind spot area a warning sounds or braking power is applied.
  - Blind-Spot Collision Warning turns on and gets ready to be activated when 'Warning only’ is selected. Then, if a vehicle approaches the driver's blind spot area a warning sounds.
  - The function is deactivated and the indicator on the Blind-Spot Safety button is extinguished when 'Off' is selected.



OFE059188L

- If you press Blind-Spot Safety button while 'Active assistance' or 'Warning only' is selected the indicator on the button extinguishes and the function deactivates.
- If you press Blind-Spot Safety button while the function is cancelled the indicator on the button illuminates and the function activates. In this case, the function returns to the state before the vehicle turned off.

  When the function is initially turned on and when the vehicle is turned off then on again while the function is in activation, the warning light will illuminate for 3 seconds on the outside rearview mirror.
- If the vehicle is turned off then on again, the function maintains the previous state.
- The driver can select the initial warning activation time in the User Settings in the infotainment system screen by selecting "Vehicle settings → Driver assistance → Warning timing"
- The options for the initial Blind-Spot Collision Warning includes the following:

  - Normal:

    When this condition is selected, the initial Blind-Spot Collision Warning is activated normally. If this setting feels too sensitive change the option to 'later'.

    The warning activation time may feel late if the side/rear vehicle abruptly accelerates.

  - Later:

    Select this warning activation time when the traffic is light and you are driving in a low speed. However, if you change the warning activation time, the warning activation time of vehicle's other system may also change. Check the warning activation time before changing it.

- The driver can select the warning volume of Blind-Spot Collision Warning in the User Settings in the infotainment system screen by selecting "Vehicle settings → Driver assistance → Warning volume → High/Medium/Low" the warning volume of vehicle's other system may also change.

  **For more information refer to the separately supplied Navigation manual.**

### *Operating Conditions*

The function enters the ready status, when the 'Active assistance' or 'Warning only' is selected and following conditions are satisfied:

1) Collision-Avoidance Assist will activate when
   - Vehicle speed is between 38 mph~112 mph (60 km/h~180 km/h).
   - The function detects both of the lane lines.
   - An approaching vehicle is detected next to/behind your vehicle.
2) Blind-Spot Collision Warning will activate when

   The vehicle speed is above about 20 mph (30 km/h).

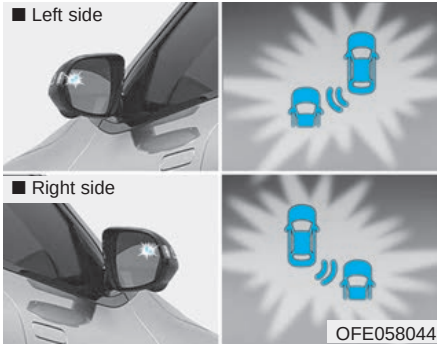
- Select the "Warning only"

1) Collision Warning will activate when
   - The vehicle speed is above about 20 mph (30 km/h)

❊ Blind-Spot Collision-Avoidance Assist is not activated.

## Warning message and function control

### *Collision Warning*




#### First stage alert

If a vehicle is detected within the boundary of the function, a warning light will illuminate on the outside rearview mirror.

Once the detected vehicle is no longer within the blind spot area, the warning will turn off according to the driving conditions of the vehicle.

[A] : Warning sound

#### Second stage alert

A warning chime to alert the driver will activate when:

1. A vehicle has been detected in the blind spot area by the radar.
2. The turn signal is applied (same side as where the vehicle is being detected).

When this alert is activated, the warning light on the outside rearview mirror will also blink. And a warning chime will sound.

If you turn off the turn signal indicator, the second stage alert will be deactivated.

Once the detected vehicle is no longer within the blind spot area, the warning will turn off according to the driving conditions of the vehicle.

**⚠ WARNING**

- **The warning light on the outside rearview mirror will illuminate whenever a vehicle is detected at the rear side by the function.**

  **To avoid accidents, do not focus only on the warning light and neglect to see the surrounding of the vehicle.**
- **Drive safely even though the vehicle is equipped with a Blind-Spot Collision Warning. Do not solely rely on the function but check your surrounding before changing lanes or backing the vehicle up.**
- **The function may not alert the driver in some conditions so always check your surroundings while driving.**

**⚠ CAUTION**

- **The driver should always use extreme caution while operating the vehicle, whether or not the warning light on the outside rearview mirror illuminates or there is a warning alarm.**
- **Playing the vehicle audio system at high volume may offset Blind-Spot Collision Warning warning sounds.**
- **The warning of Blind-Spot Collision Warning may not sound while other system's warning sounds.**

### *Collision-Avoidance Assist*

■ Type A

OFE058149L

■ Type B

OFE050450L

Blind-Spot Collision-Avoidance Assist may apply braking power, when an approaching vehicle is detected within a certain distance next to/behind your vehicle.

It gently applies braking power on the tire, which is located in the opposite side of the possibly-colliding point. The instrument cluster will inform the driver of the function activation.

Blind-Spot Collision-Avoidance Assist is automatically deactivated when:

- The vehicle drives a certain distance away
- The vehicle direction is changed against the possible-colliding point
- The steering wheel is abruptly moved
- The brake pedal is depressed
- After a certain period of time

The driver should drive the vehicle in the middle of the vehicle lanes to keep the function in the ready status.

When the vehicle drives too close to one side of the vehicle lanes, the function may not properly operate.

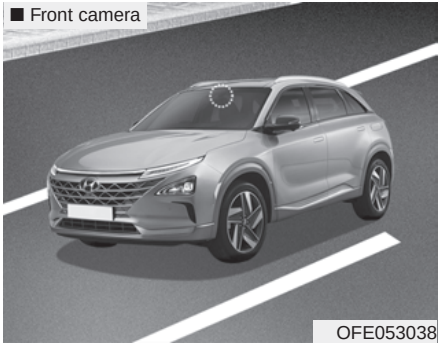
In addition, the function may not properly control your vehicle in accordance with driving situations. Thus, always pay close attention to road situations.

**⚠ WARNING**

- **The driver is responsible for accurate steering.**
- **Do not unnecessarily operate the steering wheel, when Blind-Spot Collision-Avoidance Assist is in operation.**
- **Always pay extreme caution while driving. Blind-Spot Collision-Avoidance Assist may not operate or unnecessarily operate in accordance with your driving situations.**
- **Blind-Spot Collision-Avoidance Assist is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.**

### *Detecting Sensor*

■ Front camera



OFE053038

■ Rear Corner Radar

OFE052049L

### Front camera

The front camera is a sensor detecting the lane. If the sensor is covered with snow, rain or foreign substance, the function may temporarily be cancelled and not work properly until the cancellation due to the degradation of the sensor's detection performance. Always keep the sensor clean.

* Refer to Lane Keeping Assist for cautions for the front camera sensor.

### Rear Corner Radar

The Rear Corner Radar are the sensors inside the rear bumper for detecting the side/rear areas. Always keep the bumper clean for proper operation of the function.

### Information

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

### CAUTION

- **The function may not work properly when the bumper has been damaged, or if the rear bumper has been replaced or repaired.**
- **The sensing range differs somewhat according to the width of the road. When the road is narrow, the function may detect other vehicles in the next lane.**
- **The function may turn off due to strong electromagnetic waves.**
- **Always keep the sensors clean.**
- **NEVER arbitrarily disassemble the sensor component nor apply any impact on the sensor component.**
- **Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the function may not operate correctly. In this case, a warning message may not be displayed. Have the vehicle inspected by an authorized HYUNDAI dealer.**
- **Do not apply foreign objects such as a bumper sticker or a bumper guard near the radar sensor or apply paint to the sensor area. Doing so may adversely affect the performance of the sensor.**
- **NEVER install any accessories or stickers on the front windshield, nor tint the front windshield.**
- **Pay extreme caution to keep the camera sensor out of water.**
- **NEVER locate any reflective objects (for example, white paper, mirror) over the crash pad. Any light reflection may cause a malfunction of the function.**

■ Type A

OFE058150L

■ Type B

OTM070098N

**Blind-Spot Collision Warning system disabled.**
**Rear Corner Radar blocked**

- This warning message may appear when :
  - One or both of the sensors on the rear bumper is blocked by dirt or snow or a foreign object.
  - Driving in rural areas where the sensor does not detect another vehicle for an extended period of time.
  - When there is inclement weather such as heavy snow or rain.

If any of these conditions occur, the light on the Blind-Spot Safety button and the function will turn off automatically.

Turn off Blind-Spot Collision-Avoidance Assist when a trailer or carrier is installed.

- Press the Blind-Spot Safety button (the indicator on the button extinguish)
- Deactivate Rear Cross-Traffic Collision-Avoidance Assist by deselecting

  "Vehicle settings → Driver assistance → Blind-spot safety → Rear cross-traffic safety"

  If you use Blind-Spot Collision-Avoidance Assist, remove a trailer or carrier.

When Blind-Spot Collision Warning canceled warning message is displayed in the cluster, check to make sure that the rear bumper is free from any dirt or snow in the areas where the sensor is located. Remove any dirt, snow, or foreign material that could interfere with the radar sensors.

After any dirt or debris is removed, Blind-Spot Collision-Avoidance Assist should operate normally after about 10 minutes of driving the vehicle.

If the function still does not operate normally, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the function checked.

OFE050152L

## Check Blind-Spot Collision-Avoidance Assist system

If there is a problem with Blind-Spot Collision-Avoidance Assist, a warning message will appear. The function will turn off automatically. Blind-Spot Collision Warning will still operate even if Blind-Spot Collision-Avoidance Assist turns off due to malfunction. We recommend that you have your vehicle inspected by an authorized HYUNDAI dealer to use Blind-Spot Collision-Avoidance Assist.

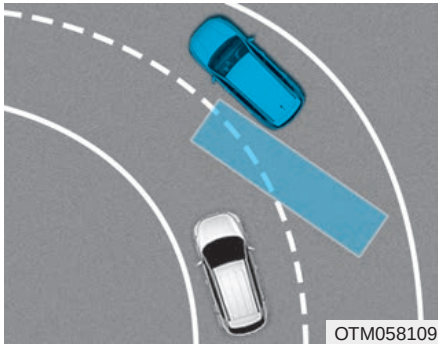
### *Limitations of the function*

The driver must be cautious in the below situations, because the function may not detect other vehicles or objects in certain circumstances.

- When a trailer or carrier is installed.
- The vehicle drives in inclement weather such as heavy rain or snow.
- The sensor is polluted with rain, snow, mud, etc.
- The rear bumper where the sensor is located is covered with a foreign object such as a bumper sticker, a bumper guard, a bike rack, etc.
- The rear bumper is damaged, or the sensor is out of the original default position.
- The vehicle height gets lower or higher due to heavy loading in a trunk, abnormal tire pressure, etc.
- When the temperature of the rear bumper is high.
- When the sensors are blocked by other vehicles, walls or parking-lot pillars.
- The vehicle drives on a curved road.
- The vehicle drives through a toll-gate.
- 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 a guardrail.
- While going down or up a steep road where the height of the lane is different.
- Driving on a narrow road where trees or grass or overgrown.
- Driving in rural areas where the sensor does not detect another vehicle or structure for an extended period of time.
- Driving on a wet road.
- Driving on a road where the guardrail or wall is in double structure.
- A big vehicle is near such as a bus or truck.
- When the other vehicle approaches very close.

- When the other vehicle passes at a very fast speed.
- While changing lanes.
- If the vehicle has started at the same time as the vehicle next to you and has accelerated.
- When the vehicle in the next lane moves two lanes away from you OR when the vehicle two lanes away moves to the next lane from you.
- A motorcycle or bicycle is near.
- A flat trailer is near.
- If there are small objects in the detecting area such as a shopping cart or a baby stroller.
- If there is a low height vehicle such as a sports car.
- The brake pedal is depressed.
- ESC (Electronic Stability Control) is activated.
- ESC (Electronic Stability Control) malfunctions.
- The tire pressure is low or a tire is damaged.
- The brake is reworked.
- The vehicle abruptly changes driving direction.
- The vehicle makes sharp lane changes.
- The vehicle sharply stops.
- Temperature is extremely low around the vehicle.
- The vehicle severely vibrates while driving over a bumpy road, uneven/bumpy road, or concrete patch.
- The vehicle drives on a slippery surface due to snow, water puddle, or ice.
- Lane Keeping Assist or Lane Departure Warning do not operate normally. (if equipped)

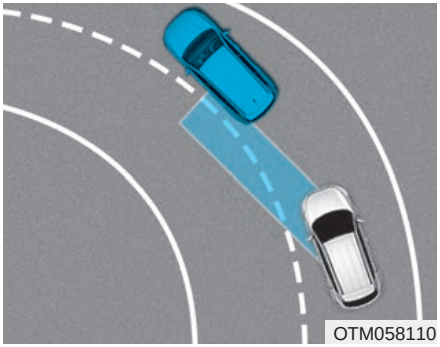
  For more information refer to "Lane Keeping Assist" in this chapter.


OTM058109

- Driving on a curve

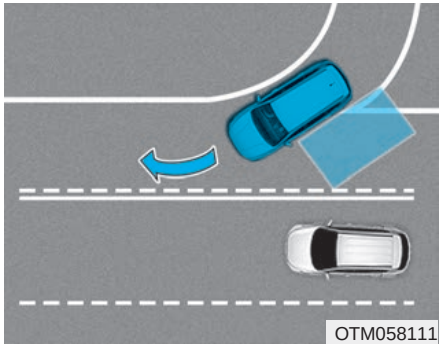
Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a curved road. In certain instances the function may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions, while driving.


OTM058110

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

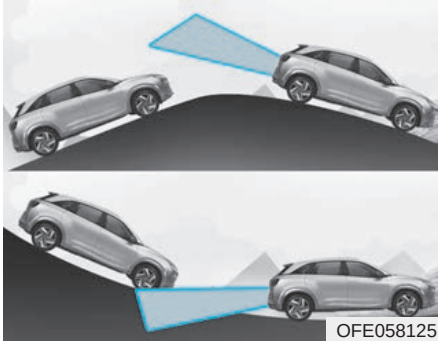
Always pay attention to road and driving conditions, while driving.


OTM058111

- Driving where the road is merging/dividing

Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the road is merging/dividing. In certain instances the function may not detect the vehicle in the next lane.

Always pay attention to road and driving conditions, while driving.

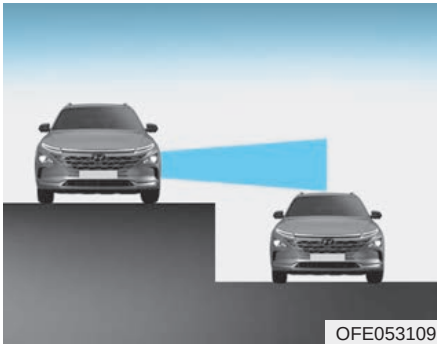

OFE058125

- Driving on a slope

Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist may not operate properly when driving on a slope. In certain instances the function may not detect the vehicle in the next lane.

Also, in certain instances the function may wrongly recognize the ground or structures.

Always pay attention to road and driving conditions, while driving.




- Driving where the heights of the lanes are different

Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist may not operate properly when driving where the heights of the lanes are different.

In certain instances, 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.

[A] : noise barrier, [B] : guardrail

- Driving where there is a structure beside the road

Blind-Spot Collision Warning and Blind-Spot Collision-Avoidance Assist may not operate properly when driving where there is structure beside the road.

In certain instances, the function may wrongly recognize the structures (noise barriers, guardrail, double guardrail, median strip, bollard, street light, road sign, tunnel wall, etc.) beside the road.

Always pay attention to road and driving conditions, while driving.

## Information

**This device complies with Part 15 of the FCC rules.**

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

1. **This device may not cause harmful interference.**
2. **This device must accept any interference received, including interference that may cause undesired operation.**

# DRIVER ATTENTION WARNING (DAW)

Driver Attention Warning displays the condition of the driver's fatigue level and inattentive driving practices.

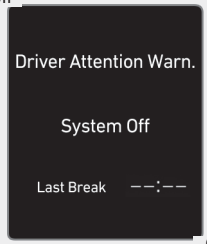
## Driver Attention Warning setting and activation

### *Function setting*

- Driver Attention Warning is set to be in the ON position, when your vehicle is first delivered to you from the factory.
- To turn ON Driver Attention Warning , turn on the vehicle, and then select "Vehicle settings → Driver Assistance → Driver Attention Warning → High Sensitivity/ Normal Sensitivity" on the infotainment system screen.
- The driver can select Driver Attention Warning mode.
  - Off : Driver Attention Warning is deactivated.
  - Normal Sensitivity : Driver Attention Warning alerts the driver of his/her fatigue level or inattentive driving practices.
  - High Sensitivity : Driver Attention Warning alerts the driver of his/her fatigue level or inattentive driving practices faster than Normal mode.
- The set-up of Driver Attention Warning will be maintained, as selected, when the vehicle is restarted.

### *Display of the driver's attention level*

■ Function off




OTM070102N

■ Attentive driving

• Type A

OFE058158L

• Type B

OTM070190N

■ Inattentive driving

• Type A

OFE058159L

• Type B

OTM070191N

- The driver can monitor their driving conditions on the cluster display.

  The Driver Attention Warning screen will appear when you select the Driving Assist mode tab on the cluster display if the function is activated. **(For more details, refer to "Cluster Display Modes" in chapter 3.)**
- The driver's attention level is displayed on the scale of 1 to 5. The lower the level is, the more inattentive the driver is.
- The level decreases when the driver does not take a break for a certain period of time.
- The level increases when the driver attentively drives for a certain period of time.
- When the driver turns on the function while driving, it displays 'Last Break time' and level.

### *Take a break*

OTM070105L

- The "Consider taking a break" message appears on the cluster display and a warning sounds in order to suggest the driver to take a break, when the driver's attention level is below 1.
- Driver Attention Warning does not suggest the driver to take a break, when the total driving time is shorter than 10 minutes.

## Resetting Driver Attention Warning

- The last break time is set to 00:00 and the driver's attention level is set to 5 (very attentive) when the driver resets Driver Attention Warning system.
- Driver Attention Warning resets the last break time to 00:00 and the driver's attention level to 5 in the following situations.
  - The vehicle is turned OFF.
  - The driver unfastens the seat belt and then opens the driver's door.
  - The vehicle is stopped for more than 10 minutes.
- Driver Attention Warning operates again, when the driver restarts driving.

## Driver Attention Warning standby

OTM070106N

Driver Attention Warning enters the ready status and displays the 'Standby' screen in the following situations.

- The camera does not detect the lane.
- Driving speed remains under 38 mph (60 km/h) or over 112 mph (180 km/h).

## Driver Attention Warning malfunction

OTM070107L

### Check Driver Attention Warning (DAW) system

When the "Check Driver Attention Warning (DAW) system" warning message appears, the function is not working properly. In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

**⚠ WARNING**

- **Driver Attention Warning is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.**
- **The function may suggest a break according to the driver's driving pattern or habits even if the driver doesn't feel fatigue.**
- **The driver, who feels fatigued, should take a break, even though there is no break suggestion by Driver Attention Warning.**

***NOTICE***

**The Driver Attention Warning (DAW) utilizes the camera sensor on the front windshield for its operation. To keep the camera sensor in the best condition, you should observe the followings:**

- **NEVER install any accessories or stickers on the front windshield, nor tint the front windshield.**
- **NEVER locate any reflective objects (for example, white paper, mirror) over the dashboard. Any light reflection may cause a malfunction of Driver Attention Warning.**
- **Pay extreme caution to keep the camera sensor out of water.**
- **NEVER disassemble the camera assembly, nor apply any impact on the camera assembly.**

- **Do not disassemble the camera temporarily for tinted window or attaching any types of coatings and accessories.**

  **If you disassemble a camera and assemble it again, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the function checked for calibration.**

**⚠ CAUTION**

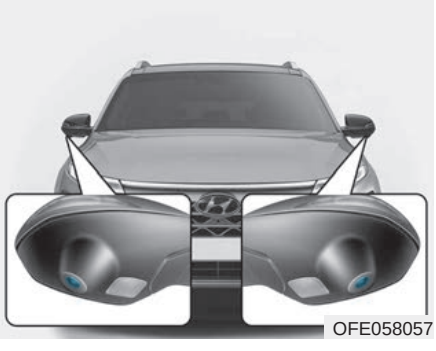
**Driver Attention Warning may not properly operate with limited alerting in the following situations:**

- **The lane detection performance is limited. (For more information, refer to "Lane Keeping Assist (LKA)" in this chapter.)**
- **The vehicle is violently driven or is abruptly turned for obstacle avoidance (for example, construction area, other vehicles, fallen objects, bumpy road).**
- **Forward drivability of the vehicle is severely undermined (possibly due to wide variation in tire pressures, uneven tire wear-out, toe-in/toe-out alignment).**
- **The vehicle drives on a curvy road.**
- **The vehicle drives through a windy area.**
- **The vehicle drives on a bumpy road.**
- **The vehicle is controlled by the following driving assist systems:**
  - **Lane Keeping Assist**
  - **Forward Collision-Avoidance Assist**
  - **Smart Cruise Control**
  - **Lane Following Assist**

**⚠ CAUTION**

**Playing the vehicle audio system at high volume may offset the Driver Attention Warning warning sounds.**

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


OFE058057

Blind-Spot View Monitor is designed to help safe driving by providing broader view than the outside rearview mirrors by displaying rear/side area view on the cluster when the driver turns on the turn signal to change lane.

The function shows the following vehicle on the corresponding side using the cameras at the outside rearview mirrors when the driver turns on the turn signal to change lane.

## Operating conditions

With the vehicle on, select the "Driver assistance → Blind-spot safety → Blind-spot view" from the vehicle settings in the infotainment system screen. Then the corresponding left or right side of the vehicle will be displayed on the cluster if the driver turns on the turn signal while driving.

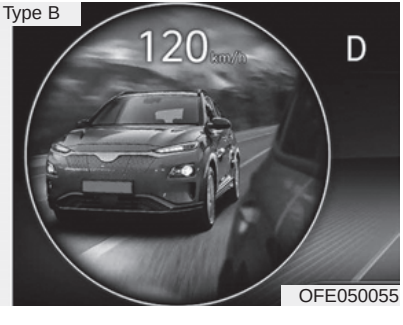
### *Blind-Spot View Monitor operation*

■ Left

• Type A

OFE058055

• Type B



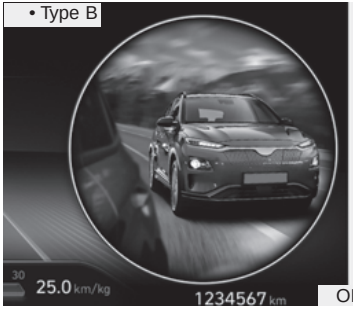
OFE050055

■ Right

• Type A

OFE058056

• Type B




OFE052056

Operate the turn signal while driving and the corresponding left or right side rear view will be shown on the cluster.

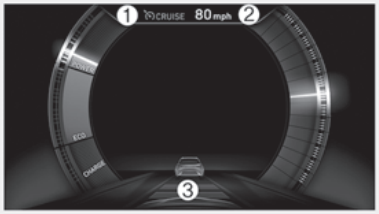
## Blind-Spot View Monitor warning

This message is displayed if the camera recognition function cannot detect the following vehicle due to the weather condition and the function may not operate properly.

Check the surrounding condition visually and with the outside rearview mirrors when driving.

# SMART CRUISE CONTROL (SCC)

■ Type A




OFE058169N

■ Type B

OFE053069N

① Cruise indicator
② Set speed
③ Vehicle distance

Smart Cruise Control allows you to program the vehicle to maintain constant speed and minimum distance between the vehicle ahead.

Smart Cruise Control will automatically adjust your vehicle speed to maintain your programmed speed and following distance without requiring you to depress the accelerator or brake pedals.

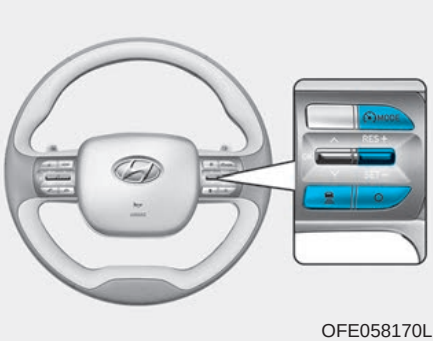
**⚠ WARNING**

**For your safety, please read the owner's manual before using Smart Cruise Control.**

**⚠ WARNING**

**Smart Cruise Control is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.**

## Smart Cruise Control Switch




OFE058170L

MODE : Turns Smart Cruise Control on or off.

RES+: Resumes or increases Smart Cruise Control speed.

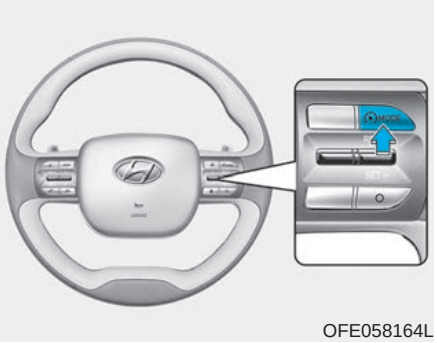
SET-: Sets or decreases Smart Cruise Control speed.

: Sets vehicle distance.

O : Cancels Smart Cruise Control operation.

## Smart Cruise Control speed

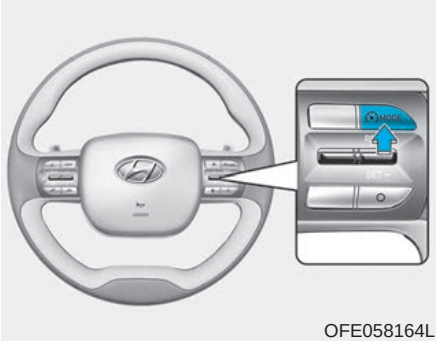
### *To set Smart Cruise Control speed*



OFE058164L

1. Push the MODE button on the steering wheel to turn the function on. The cruise indicator will illuminate.

### Information



OFE058164L

**First, switch the mode to Smart Cruise Control by pressing the MODE button.**

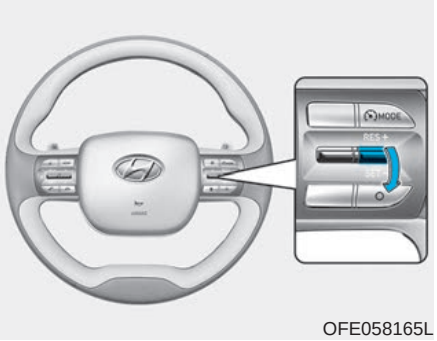
**The mode changes, as below, whenever the MODE button is pressed.**

**System off → Smart Cruise Control → Speed Limit Control → System off**

2. Accelerate to the desired speed.

   The Smart Cruise Control speed can be set as follows :

   - 6 mph (10 km/h) ~ 105 mph (170 km/h): when there is no vehicle in front
   - 0 mph (0 km/h) ~ 105 mph (170 km/h): when there is a vehicle in front



OFE058165L

3. Push the switch down (SET-). The Set Speed and Vehicle Distance on the cluster display will illuminate.
4. Release the accelerator pedal. The desired speed will automatically be maintained.

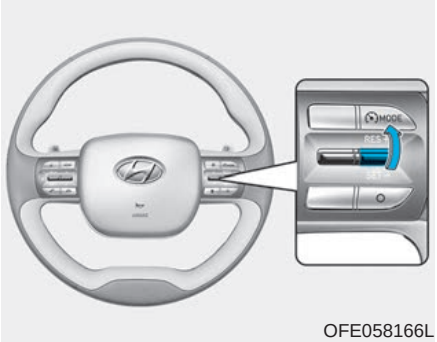
If there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead.

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

### Information

- **Vehicle speed may decrease on an upward slope and increase on a downward slope.**
- **When you are setting the cruise control speed, with a vehicle in front and your vehicle speed is between 0 ~ 20 mph (0 ~ 30 km/h), the speed will set to 20 mph (30 km/h).**

### *To increase Smart Cruise Control set speed*



OFE058166L

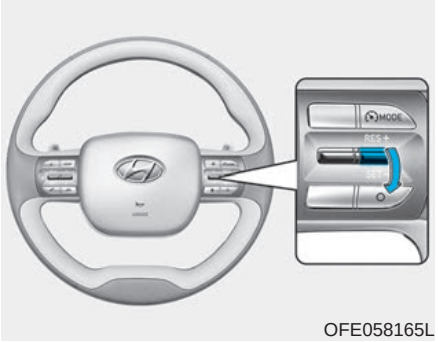
Follow either of these procedures:

- Push the switch up (RES+), and release it immediately. The cruising speed will increase by 1 mph (1 km/h) each time you move the switch up in this manner.
- Push the switch up (RES+), and hold it. Your vehicle set speed will increase by 5 mph (10 km/h). Release the switch at the speed you want.
- You can increase the set speed to 105 mph (170 km/h).

**⚠ CAUTION**

**Check the driving condition before using the switch. Driving speed sharply increases, when you push up and hold the switch.**

### *To decrease the Smart Cruise Control set speed*




OFE058165L

Follow either of these procedures:

- Push the switch down (SET-), and release it immediately. The cruising speed will decrease by 1 km/h (1 1 mph (1 km/h) each time you move the switch down in this manner.
- Push the switch down (SET-), and hold it. Your vehicle set speed will decrease by 5 mph (10 km/h). Release the switch at the speed you want.
- You can decrease the set speed to 20 mph (30 km/h).

### *To temporarily accelerate with Smart Cruise Control on*

If you want to speed up temporarily when Smart Cruise Control is on, depress the accelerator pedal. Increased speed will not interfere with Smart Cruise Control operation or change the set speed.

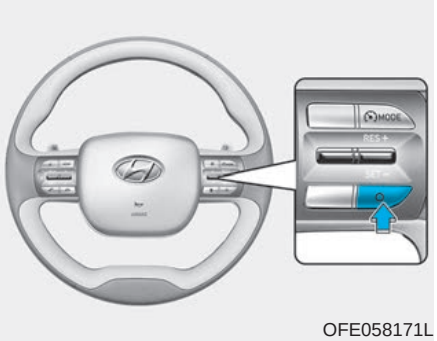
To return to the set speed, take your foot off the accelerator pedal.

If you push the switch down (SET-) at increased speed, the set speed will be set again.

**i Information**

**Be careful when accelerating temporarily, because the speed is not controlled automatically at this time even if there is a vehicle in front of you.**

***Smart Cruise Control will be temporarily canceled when:***



OFE058171L

**Cancelled manually**

- Depressing the brake pedal.
- Pushing the O button located on the steering wheel.

Smart Cruise Control turns off temporarily when the Set Speed and Vehicle-to-Vehicle Distance indicator on the cluster display turns off.

The cruise indicator is illuminated continuously.

**Cancelled automatically**

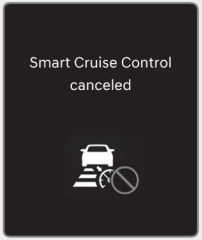
- The driver's door is opened.
- The vehicle is shifted to N (Neutral), R (Reverse) or P (Park).
- The parking brake is applied.
- The vehicle speed is over 110 mph (180 km/h).
- The ESC (Electronic Stability Control), TCS (Traction Control System) or ABS is operating.
- The ESC is turned off.
- The sensor or the cover is dirty or blocked with foreign matter.
- The vehicle is stopped for a certain period of time.
- The vehicle stops and goes repeatedly for a long period of time.
- The accelerator pedal is continuously depressed for a long period of time.
- The driver starts driving by pushing the switch up (RES+)/down (SET-) or depressing the accelerator pedal, after the vehicle is stopped by the Smart Cruise Control with no other vehicle ahead.
- The driver starts driving by pushing the switch up (RES+)/down (SET-) or depressing the accelerator pedal, after stopping the vehicle with a vehicle stopped far away in front.
- Forward Collision-Avoidance Assist is activated.

Each of these actions will cancel the Smart Cruise Control operation. The Set Speed and Vehicle-to-Vehicle Distance on the cluster display will go off.

In a condition Smart Cruise Control is cancelled automatically, Smart Cruise Control will not resume even though the RES+ or SET- switch is pushed.

### Information

**If Smart Cruise Control is cancelled by other than the reasons mentioned, we recommend that the function be checked by an authorized HYUNDAI dealer.**




OTM070113N

**Smart Cruise Control cancelled**

If the function is cancelled, the warning chime will sound and a message will appear for a few seconds.

You must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

Always check the road conditions. Do not rely on the warning chime.

### *To resume Smart Cruise Control set speed*

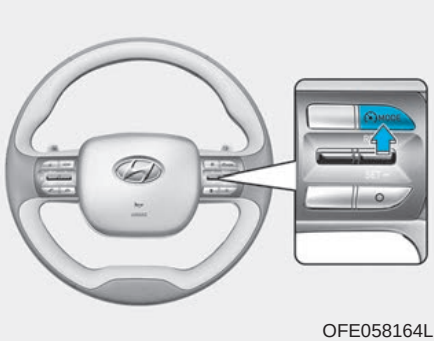
If any method other than the cruise switch was used to cancel cruising speed and the function is still activated, the cruising speed will automatically resume when you push the switch up (RES+) or down (SET-).

If you push the switch up (RES+), the speed will resume to the recently set speed. However, if vehicle speed drops below 6 mph (10 km/h), it will resume when there is a vehicle in front of your vehicle.

### Information

**Always check the road conditions when you push the switch up (RES+) to resume speed.**

### *To turn Smart Cruise Control off*




OFE058164L

- Pushing the MODE button. The cruise indicator will go off.
  - With Smart Cruise Control on, pressing the button once will turn Off the Smart Cruise Control and turn on the Speed Limit Control.
  - With the Smart Cruise Control off and Speed Limit Control on, pressing the button will turn off both system.

### Information

**The mode changes, as below, whenever the MODE button is pressed.**

**System off → Smart Cruise Control → Speed Limit Control → System off**

### WARNING

**Take the following precautions :**

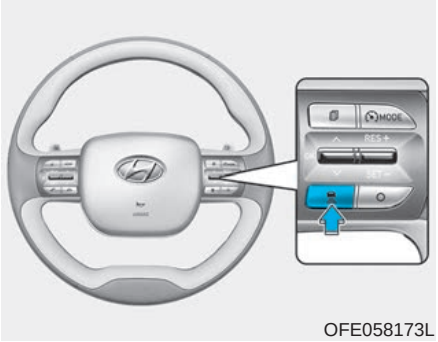
- **Always set the vehicle speed under the speed limit in your country.**
- **If Smart Cruise Control is left on, ( CRUISE indicator light in the instrument cluster is illuminated) Smart Cruise Control can be activated unintentionally. Keep Smart Cruise Control off ( CRUISE indicator light OFF) when Smart Cruise Control is not in use, to avoid inadvertently setting a speed.**
- **Use Smart Cruise Control only when traveling on open highways in good weather.**
  - **When driving on rainy, icy, or snow-covered roads**
  - **When driving on a steep downhill or uphill**
  - **When driving in windy areas**
  - **When driving in parking lots**

- **When driving near crash barriers**
- **When driving on a sharp curve**
- **When driving with limited view (possibly due to bad weather, such as fog, snow, rain or sandstorm)**
- **When the vehicle sensing ability decreases due to vehicle modification resulting level difference of the vehicle's front and rear**

- **Unexpected situations may lead to possible accidents. Pay attention continuously to road conditions and driving even when Smart Cruise Control is being operated.**

## Smart Cruise Control Vehicle-to-Vehicle Distance

### *To set Vehicle-to-Vehicle Distance*



OFE058173L

When the Smart Cruise Control is ON, you can set and maintain the distance from the vehicle ahead of you without pressing the accelerator or brake pedal.

Each time the button is pressed, the vehicle to vehicle distance changes as follows:

Distance 4 → Distance 3 → Distance 2 → Distance 1 → Distance 4

For example, if you drive at 56 mph (90 km/h), the distance maintain as follows:

Distance 4 – approximately 172 ft. (52.5 m)

Distance 3 – approximately 131 ft. (40 m)

Distance 2 – approximately 106 ft. (32.5 m)

Distance 1 – approximately 82 ft. (25 m)

### Information

**The distance is set to the last set distance when the function is used for the first time after starting the vehicle.**

### *When the lane ahead is clear:*

■ Type A

OFE053174N

■ Type B

OFE053498N

The vehicle speed will maintain the set speed.

### *When there is a vehicle ahead of you in your lane:*

■ Type A

Distance 4

Distance 3

Distance 2

Distance 1

OFE053175N/OFE053176N/OFE053177N/OFE053178N

■ Type B

Distance 4

Distance 3

Distance 2

Distance 1

OFE051071N/OFE051070N/OFE051069N/OFE051068N

- Your vehicle speed will slow down or speed up to maintain the selected distance.
- If the vehicle ahead speeds up, your vehicle will travel at a steady cruising speed after accelerating to the set speed.
- If distance from the front vehicle has been changed due to accelerating or decelerating of front vehicle, the distance on the cluster display may be changed.

## ⚠ WARNING

■ Type A

OFE058144L

■ Type B

OFE050035L

**When using Smart Cruise Control:**

- **The warning message appears and warning chime sounds if the vehicle is unable to maintain the selected distance from the vehicle ahead.**
- **If the warning message appears and warning chime sounds, depress the brake pedal to actively adjust the vehicle speed, and the distance to the vehicle ahead.**
- **Even if the warning message does not appear and warning chime does not sound, always pay attention to the driving conditions to prevent dangerous situations from occurring.**
- **Playing the vehicle audio system at high volume may offset the function warning sounds.**

## ⚠ CAUTION

■ Type A

OFE058179L

■ Type B

OFE050441L

**If the vehicle ahead (vehicle speed: less than 18 mph (30 km/h)) disappears to the next lane, the warning chime will sound and a message "Watch for surrounding vehicles" will appear.**

**Adjust your vehicle speed for vehicles or objects that can suddenly appear in front of you by depressing the brake pedal.**

**Always pay attention to the road condition ahead.**

### *In traffic situation*

■ Type A

OFE058180L

■ Type B

OTM070114L

#### Use switch or pedal to accelerate

- In traffic, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving, your vehicle will start as well. However, if the vehicle stops for more than 3 seconds, you must depress the accelerator pedal or push up the switch (RES+) or push down the switch (SET-) to start driving.
- If you push the switch (RES+ or SET-) while Auto Hold and advanced Smart Cruise Control is operating the Auto Hold will be released regardless of accelerator pedal operation and the vehicle will start to move. The AUTO HOLD indicator changes from green to white. (if equipped with EPB (Electronic Parking Brake))

## Sensor to detect distance to the vehicle ahead

OFE058075

Smart Cruise Control uses a sensor to detect distance to the vehicle ahead.

If the sensor is covered with dirt or other foreign matter, the vehicle to vehicle distance control may not operate correctly.

Always keep the sensor clean.

### *Warning message*

OTM070115N

**Smart Cruise Control disabled. Radar blocked**

When the sensor lens cover is blocked with dirt, snow, or debris, Smart Cruise Control operation may stop temporarily. If this occurs, a warning message will appear on the cluster display. Remove any dirt, snow, or debris and clean the radar sensor lens cover before operating Smart Cruise Control.

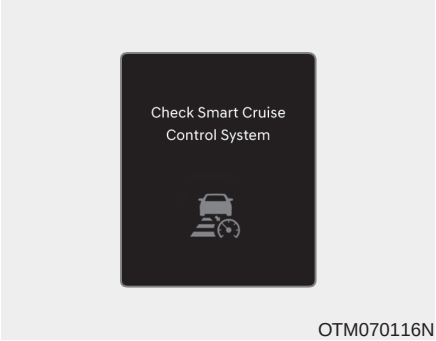
The Smart Cruise Control may not properly activate, if the radar is totally contaminated, or if any substance is not detected after turning ON the vehicle (for example, in an open terrain).

### Information

**For Smart Cruise Control operation is temporarily stopped if the radar is blocked, but you wish to use cruise control mode (speed control function), you must convert to the cruise control mode (refer to "To convert to Cruise Control mode" in the following page.**

## ⚠ CAUTION

- **Do not apply license plate frame or foreign objects such as a bumper sticker or a bumper guard near the radar sensor. Doing so may adversely affect the sensing performance of the radar.**
- **Always keep the radar sensor and lens cover clean and free of dirt and debris.**
- **Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.**
- **Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the Smart Recuperation System may not operate correctly. In this case, a warning message may not be displayed. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.**
- **If the front bumper becomes damaged in the area around the radar sensor, Smart Cruise Control may not operate properly. We recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.**
- **Use only Hyundai parts to repair or replace a damaged sensor or sensor cover. Do not apply paint to the sensor cover.**



OTM070116N

### Check Smart Cruise Control System

The message will appear when the vehicle to vehicle distance control system is not functioning normally.

We recommend that you take your vehicle to an authorized HYUNDAI dealer and have the function checked.

### To adjust the sensitivity of Smart Cruise Control

The sensitivity of vehicle speed when following the front vehicle to maintain the set distance can be adjusted. Go to the 'Vehicle settings → Driver assistance → SCC response → Fast/Normal/Slow' on the infotainment system screen. You may select one of the three stages you prefer.

- Fast:

  Vehicle speed following the front vehicle to maintain the set distance is faster than normal speed.
- Normal:

  Vehicle speed following the front vehicle to maintain the set distance is normal.
- Slow:

  Vehicle speed following the front vehicle to maintain the set distance is slower than normal speed.

**Information**

**The last selected speed sensitivity of Smart Cruise Control is remained in the function.**

### To convert to Cruise Control mode

The driver may choose to only use the conventional Cruise Control mode (speed control function) by doing as follows:

1. Turn Smart Cruise Control on (the cruise indicator light will be on but the function will not be activated).
2. Push and hold the Vehicle-to-Vehicle Distance button for more than 2 seconds.
3. Choose between "Smart Cruise Control" and "Cruise Control".

When the function is canceled using the MODE button or the MODE button after the vehicle is turned on, the Smart Cruise Control mode will turn on.

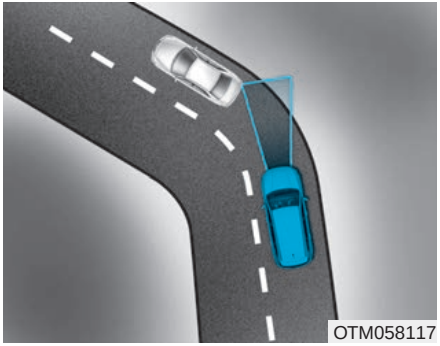
**WARNING**

**When using the Cruise Control mode, you must manually adjust the distance to other vehicles by depressing the brake pedal. The function does not automatically adjust the distance to vehicles in front of you.**

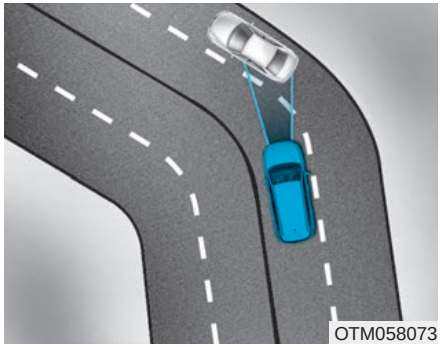
## Limitations of Smart Cruise Control

Smart Cruise Control may have limits to its ability to detect distance to the vehicle ahead due to road and traffic conditions.

### *On curves*



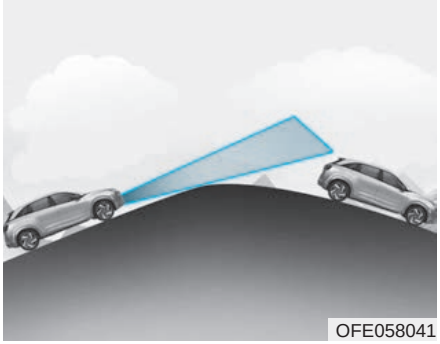

- The Smart Cruise Control may not detect a moving vehicle in your lane, and then your vehicle could accelerate to the set speed. Also, the vehicle speed will decrease when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on curves and apply the brakes or accelerator pedal if necessary.




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

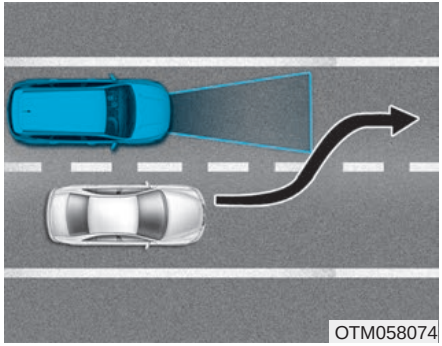
Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the Smart Cruise Control.

### *On inclines*


OFE058041

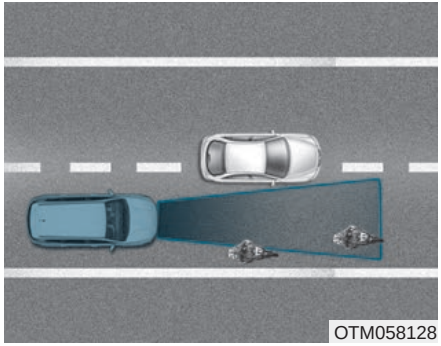
- During uphill or downhill driving, Smart Cruise Control may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, the vehicle speed will rapidly decrease when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on inclines and apply the brake or accelerator pedal if necessary.

### *Lane changing*


OTM058074

- A vehicle which moves into your lane from an adjacent lane cannot be recognized by the sensor until it is in the sensor's detection range.
- The radar may not detect immediately when a vehicle cuts in suddenly. Always pay attention to the traffic, road and driving conditions.
- If a slower vehicle moves into your lane, your speed may decrease to maintain the distance to the vehicle ahead.
- If a faster vehicle which moves into your lane, your vehicle will accelerate to the set speed.

### *Vehicle recognition*


OTM058128

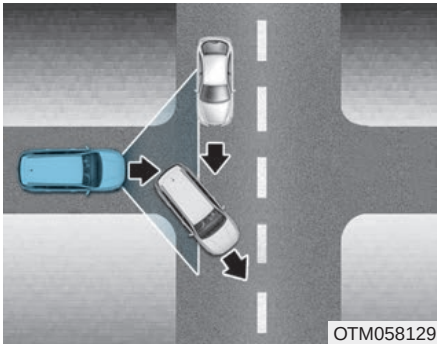
Some vehicles in your lane cannot be recognized by the sensor:

- Narrow vehicles such as motorcycles or bicycles
- Vehicles offset to one side
- Slow-moving vehicles or sudden-decelerating vehicles
- Stopped vehicles
- Vehicles with small rear profile such as trailers with no loads

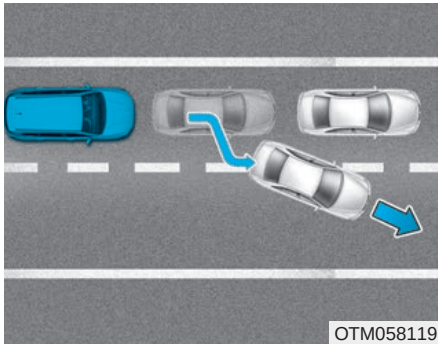
A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs:

- When the vehicle is pointing upwards due to overloading in the luggage compartment
- While the steering wheel is operating
- When driving to one side of the lane
- When driving on narrow lanes or on curves

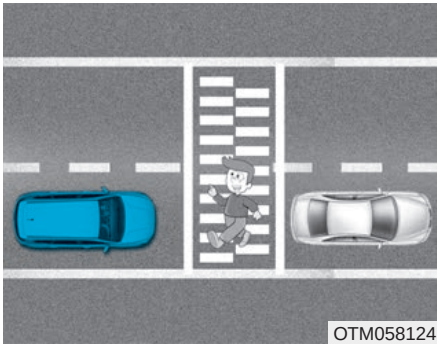
Apply the brake or accelerator pedal if necessary.


OTM058129

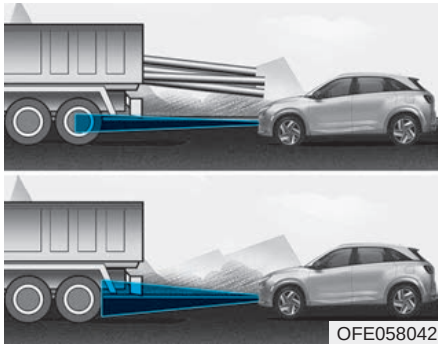
- Your vehicle may accelerate when a vehicle ahead of you disappears.
- When you are warned that the vehicle ahead of you is not detected, drive with caution.


OTM058119

- When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, the function may not immediately detect the new vehicle that is now in front of you. 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.


OTM058124

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


OFE058042

- Always be cautious for vehicles with higher height or vehicles carrying loads that sticks out from the back of the vehicle.

**⚠ WARNING**

**When using Smart Cruise Control take the following precautions:**

- **If an emergency stop is necessary, you must apply the brakes. The vehicle cannot be stopped at every emergency situation by using the Smart Cruise Control.**
- **Keep a safe distance according to road conditions and vehicle speed. If the vehicle to vehicle distance is too close during a high-speed driving, a serious collision may result.**
- **Always maintain sufficient braking distance and decelerate your vehicle by applying the brakes if necessary.**

- Smart Cruise Control cannot recognize a stopped vehicle, pedestrians or an oncoming vehicle. 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 the function's reaction or may cause the function 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 selected speed and vehicle to vehicle distance. The driver should not solely rely on the function but always pay attention to driving conditions and control your vehicle speed.

- Smart Cruise Control may not recognize complex driving situations so always pay attention to driving conditions and control your vehicle speed.

**NOTICE**

Smart Cruise Control may not operate temporarily due to:

- Electrical interference
- Modifying the suspension
- Differences of tire abrasion or tire pressure
- Installing different type of tires

### Information

This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

### Information

Radio frequency radiation exposure information:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

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

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

# LEADING VEHICLE DEPARTURE ALERT (IF EQUIPPED)

Leading Vehicle Departure Alert function alerts the driver of the departure of the vehicle in front when the vehicle is stopped and Smart Cruise Control is in activation.

## Leading Vehicle Departure Alert Setting and Operating Conditions

### *Function setting*

With the vehicle ON, the Leading Vehicle Departure Alert function turns on and gets ready to be activated when the 'vehicle Settings → Driver Assistance → Driving assist → Leading vehicle departure alert' is selected on the cluster. The function stops operation when the setting is deactivated. However, if the vehicle is turned off then on again, the function maintains the previous state.

■ Type A

OFE058180L

■ Type B

OTM070114L

### *Operating conditions*

While Smart Cruise Control system is in operation, your vehicle stops behind the vehicle in front when it stops. The message is displayed on the cluster within 3 seconds after the stop and the function will be in the standby position.

### *Function activation*

■ Type A

OFE048442L

■ Type B

OFE050442L

If the driver does not take action for a certain period of time after the vehicle in front departs, the message is displayed on the cluster.

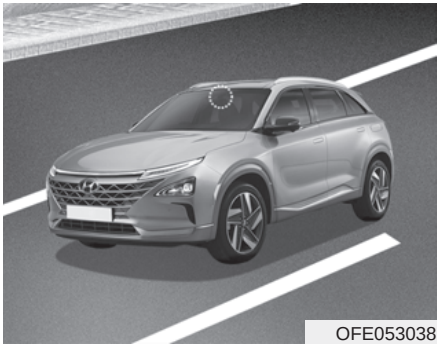
The vehicle departs automatically if the accelerator pedal is depressed or [RES +] or [SET -] switch is activated when there is a vehicle in front.

Smart Cruise Control is deactivated if the accelerator pedal is depressed or [RES +] or [SET -] switch is activated when there is no vehicle in front.

**⚠ WARNING**

**Always check the front of the vehicle and road conditions before departure.**

## LANE FOLLOWING ASSIST (LFA)


OFE053038

Lane Following Assist helps detect lane markers on the road with a front view camera at the front windshield, and assists the driver's steering to help keep the vehicle between lanes.

**⚠ WARNING**

**Lane Following Assist is not a substitute for safe driving practices, but a convenience function. It is the responsibility of the driver to always be aware of the surrounding and steer the vehicle.**

**⚠ WARNING**

**Take the following precautions when using Lane Following Assist:**

- **Do not steer the steering wheel unnecessarily when the steering wheel is being assisted by the function.**
- **Lane Following Assist helps the driver to keep the vehicle in the center of the lane by assisting the driver's steering. However, the driver should not solely rely on the function but always pay attention on the steering wheel to stay in the lane.**
- **The operation of Lane Following Assist can be canceled or not work properly according to road condition and surroundings. Always be cautious when driving.**
- **Do not disassemble Lane Following Assist camera temporarily to tint the window or attach any types of coatings and accessories. If you disassemble the camera and assemble it again, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the function checked for calibration.**
- **When you replace the windshield glass, Lane Following Assist camera or related parts of the steering wheel, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the function checked for calibration.**

- **The function detects lane markers and controls the steering wheel by a camera, therefore, if the lane markers are hard to detect, the function may not work properly.**

  **Please refer to "Limitations of Lane Following Assist".**
- **Do not remove or damage the related parts of Lane Following Assist.**
- **You may not hear a warning sound of Lane Following Assist because of excessive audio sound.**
- **Do not place objects on the dashboard that reflects light such as mirrors, white paper, etc. The function may malfunction if the sunlight is reflected.**
- **Always have your hands on the steering wheel while Lane Following Assist is activated. If you continue to drive with your hands off the steering wheel after the "Keep hands on steering wheel" warning message appears, the system will be turned off automatically.**

  **However, if the driver has their hands on the steering wheel again, the function will start controlling the steering wheel.**
- **The steering wheel may not be continuously controlled by the function if the vehicle speed is too high. The driver must always follow the speed limit when using the function.**
- **If you attach objects to the steering wheel, the function may not assist steering normally or the hands off alarm may not work properly.**
- **When you tow a trailer, make sure that you turn off Lane Following Assist.**

## Lane Following Assist operation

The driver can turn on the Lane Following Assist with the vehicle on and by selecting "Vehicle settings → Driver assistance → Driving assist → LFA (Lane Following Assist)" in the infotainment system screen.

The set-up of the Lane Following Assist will be maintained, as selected, when the vehicle is restarted.

### *Operating conditions*

The function is activated when the Lane Following Assist is selected from the vehicle Settings mode when the following conditions are satisfied:

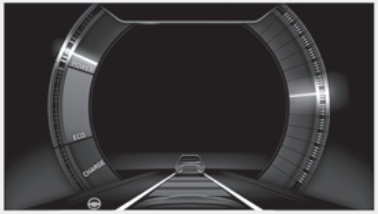
- The Smart Cruise Control is in activation (vehicle deceleration and acceleration)
- Vehicle speed is lower than 95 mph (153 km/h)

When the function is activated, the indicator ( ) on the cluster will illuminate. The color of the indicator will change depending on the condition of Lane Following Assist.

- Green : The function is in the assist state.
- White : The function is in the ready state.

### *Lane Following Assist activation*

■ Type A



OFE058126L

■ Type B

OFE053194N

- After Lane Following Assist is activated, if the vehicle is within the lane and both lane markers are detected (lane color changes grey to white) and there is no abrupt steering by the driver, indicator light will change from white to green. This indicates that Lane Following Assist is in the Driving Assist state and the steering wheel will be able to be controlled.
- The indicator light changes from green to white when the control is temporarily cancelled.
- When the function does not recognize the lane or depending on the vehicle condition in front (presence of the vehicle, driving status, etc.). the steering wheel is controlled restrictively.

  When the control of the steering wheel is stopped temporarily the activation indicator blinks in green and then changes to white.

## Warning message

■ Type A

OFE058155L

■ Type B

OFE050439L

### Keep hands on steering wheel

If the driver takes their hands off from the steering wheel for certain time while Lane Following Assist is activated, the function will warn the driver.

## Information

**If the steering wheel is held very lightly the message may still appear because Lane Following Assist may not recognize that the driver has their hands on the wheel.**

**WARNING**

**The warning message may appear late according to road conditions. Therefore, always have your hands on the steering wheel while driving.**

OFE050443L

### Driver's grasp not detected. LFA system is disabled temporarily

If the driver still does not have their hands on the steering wheel after the message "Keep hands on steering wheel", the function will not control the steering wheel and warn the driver only when the driver crosses the lane markers.

However, if the driver has their hands on the steering wheel again, the function will start controlling the steering wheel.

**⚠ WARNING**

- **The driver is responsible for accurate steering.**
- **Turn off the function and drive the vehicle in following situations.**
  - **In bad weather**
  - **In bad road condition**
  - **When the steering wheel needs to be controlled by the driver frequently.**

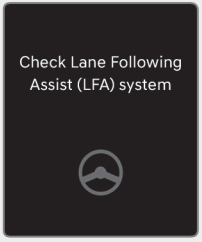
**i Information**

- **Even though the steering is assisted by the function, the driver may control the steering wheel.**
- **The steering wheel may feel heavier when the steering wheel is assisted by the function than when it is not.**

■ Type A

OFE048437L

■ Type B




OTM070118N

### Check Lane Following Assist (LFA) system

If there is a problem with the function a message will appear for a few seconds. We recommend that you have the vehicle checked by an authorized HYUNDAI dealer.

### Lane Following Assist will not be in the Driving Assist state when :

- The turn signal is turned on before changing a lane. If you change lanes without the turn signal on, the steering wheel might be controlled.
- The vehicle is not driven in the middle of the lane when the function is turned on or right after changing a lane.
- ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
- The vehicle is driven on a sharp curve with high speed.
- Vehicle speed is over 95 mph (153 km/h).
- The vehicle makes sharp lane changes.
- The vehicle brakes suddenly.
- Only one lane marker is detected.
- The lane is very wide or narrow.
- Radius of a curve is too small.
- The vehicle is driven on a steep incline.
- The steering wheel is turned suddenly.

## Limitations of Lane Following Assist

Lane Following Assist may operate prematurely even if the vehicle does not depart from the intended lane, OR, Lane Following Assist may not assist your steering if the vehicle leaves the intended lane under the following circumstances:

**When the lane and road conditions are poor**

- It is difficult to distinguish the lane marking from the road surface or the lane marking is faded or not clearly marked.
- It is difficult to distinguish the color of the lane marker from the road.
- There are markings on the road surface that look like a lane marker that is inadvertently being detected by the camera.
- The lane marker is indistinct or damaged.
- The lane marker is merged or divided. (for example, tollgate)
- The lane number increases or decreases or the lane marker are crossing complicatedly.
- There are more than two lane markers on the road in front of you.
- The lane marker is very thick or thin.
- The lane marker ahead is not visible due to rain, snow, water on the road, damaged or stained road surface, or other factors.
- The shadow is on the lane marker by a median strip, trees, guardrail, noise barriers, etc.
- The lane markers are complicated or a structure substitutes for the lines such as a construction area.
- There are crosswalk signs or other symbols on the road.
- The lane suddenly disappears such as at the intersection.

**When external condition is intervened**

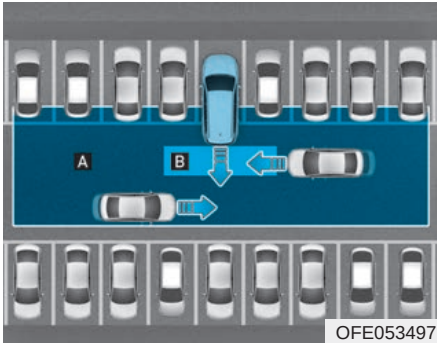
- The brightness outside changes suddenly such as when entering or exiting a tunnel, or when passing under a bridge.
- The brightness outside is too low such as when the headlights are not on at night or the vehicle is going through a tunnel.
- There is a boundary structure in the roadway such as a concrete barrier, guardrail and reflector post that is inadvertently being detected by the camera.
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road.
- The field of view in front is obstructed by sun glare.
- There is not enough distance between you and the vehicle in front to be able to detect the lane marker or the vehicle ahead is driving on the lane marker.

- Driving on a steep grade, over a hill, or when driving on a curved road.
- The adverse road conditions cause excessive vehicle vibrations while driving.
- The surrounding of the inside side view mirror temperature is high due to direct sunlight, etc.

**When front visibility is poor**

- The windshield or the camera lens is blocked with dirt or debris.
- The windshield glass is fogged up; a clear view of the road is obstructed.
- Placing objects on the dashboard, etc.
- The sensor cannot detect the lane because of fog, heavy rain or snow.

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




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

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

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

**⚠ WARNING**

- **Always be aware of road conditions while driving and be alert for unexpected situations even though Rear Cross-Traffic Collision-Avoidance Assist are operating.**
- **Rear Cross Traffic Collision-Avoidance Assist are supplemental functions to assist you. Do not entirely rely on the functions.**

  **Always pay attention, while driving, for your safety.**
- **Rear Cross-Traffic Collision-Avoidance Assist are not substitutes for proper and safe driving. Always drive safely and use caution when backing up the vehicle.**

## Rear Cross-Traffic Collision-Avoidance Assist setting and activation

### *Function setting*

- The driver can activate the functions by placing the power button to the ON position and by selecting "Vehicle settings → Driver assistance → Driving assist → Blind-spot safety → Rear Cross-Traffic Safety". Rear Cross-Traffic Collision-Avoidance Assist turn on and get ready to be activated when 'Rear Cross-Traffic safety' is selected.
- When the vehicle is turned off then on again, the functions always get ready to be activated.
- When the function is initially turned on and when the vehicle is turned off then on again, the warning light will illuminate for 3 seconds on the outside rearview mirror.

The driver can select the initial warning activation time in the Vehicle settings in the infotainment system screen by selecting "Vehicle settings → Driver assistance → Warning timing". The options for the initial Rear Cross-Traffic Collision Warning includes the following:

- Normal:

When this condition is selected, the initial Rear Cross-Traffic Collision Warning is activated normally. If this setting feels too sensitive change the option to 'late'.

The warning activation time may feel late if the side/rear vehicle abruptly accelerates.

- Later:

Select this warning activation time when the traffic is light and you are driving in a low speed. However, if you change the warning activation time, the warning activation time of vehicle's other system may also change. Check the warning activation time before changing it.

The driver can select the warning volume of the Rear Cross-Traffic Collision Warning by selecting "Vehicle settings → Driver assistance → Warning volume → High/Medium/Low". However, if you change the warning volume, the warning volume of vehicle's other system may also change.

### *Operating conditions*

The function will activate when vehicle speed is below 7 mph (10 km/h) and with the shift lever in R (Reverse).

* The function will not activate when the vehicle speed exceeds 7 mph (10 km/h). The function will activate again when the speed is below 7 mph (10 km/h).

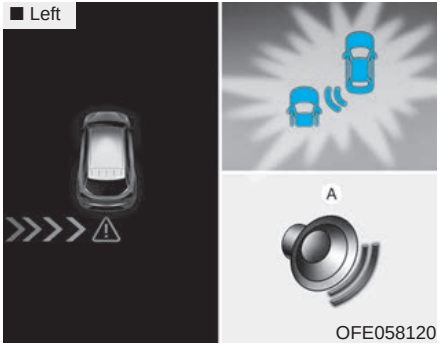
The function's detecting range is approximately 1 ft ~ 65 ft (0.5 m ~ 20 m)). An approaching vehicle will be detected if their vehicle speed is within 5 mph ~ 22.5 mph (8 km/h ~ 36 km /h).

Note that the detecting range may vary under certain conditions. As always, use caution and pay close attention to your surroundings when backing up your vehicle.

## Warning message and function control

### *Rear Cross-Traffic Collision Warning*

■ Left




OFE058120

■ Right

OFE053121AU

If the vehicle detected by the sensors approaches from the rear left/right side of your vehicle, the warning chime will sound, the warning light on the outside rearview mirror will blink and a message will appear on the cluster display. If the rear view monitor system is in activation, a message will also appear on the audio or infotainment system screen.

The warning will stop when:

- The vehicle moving at the rear left/right side of your vehicle is not in the detection range.
- The vehicle is right behind your vehicle.
- The vehicle is not driving towards your vehicle.
- The vehicle's approaching speed is decreased.

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

■ Left

OFE050153L

■ Right

OFE050154L

If the risk of collision is detected while the Rear Cross-Traffic Collision Warning is generated, brake is controlled. The instrument cluster will inform the driver of the brake control. If the rear view monitor system is in activation, a message will also appear on the audio or infotainment system screen.

After the brake control the driver must immediately depress the brake pedal and check the surroundings.

- The brake activation by the function lasts for about 2 seconds only.

  The driver must pay attention as the brake is disengaged after the time.
- The brake control by the function is cancelled if the driver depresses the pedal with sufficient power.
- Brake control is activated once for each right/left approach after shifting the shift lever to R (Reverse).

The brake control may not operate properly according to the status of the ESC (Electronic Stability Control). The same warning message is displayed on the instrument cluster for this case also.

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

**⚠ CAUTION**

- **When the operation condition of Rear Cross-Traffic Collision Warning is satisfied the warning will occur every time a vehicle approaches the side/rear of your stopped (0 mph (0 km/h) vehicle speed) vehicle.**
- **The function's warning or brake may not operate properly if the left/right of your vehicle's rear bumper is blocked by a vehicle or obstacle.**
- **The driver should always use extreme caution while operating the vehicle, whether or not the warning light on the outside rearview mirror illuminates or there is a warning alarm.**
- **Playing the vehicle audio system at high volume may offset the function's warning sounds.**
- **The warning of Rear Cross-Traffic Collision Warning may not sound while other system's warning sounds.**

**⚠ WARNING**

- **Drive safely even though the vehicle is equipped with Rear Cross-Traffic Collision-Avoidance Assist. Do not solely rely on the function but check your surrounding when backing the vehicle up.**
- **The driver is responsible for accurate brake control.**
- **Always pay extreme caution while driving. Rear Cross-Traffic Collision-Avoidance Assist may not operate properly or unnecessarily operate in accordance with your driving situations.**

- **Rear Cross-Traffic Collision-Avoidance Assist is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always drive cautiously to prevent unexpected and sudden situations from occurring. Pay attention to the road conditions at all times.**

### *Detecting Sensor*

The rear corner radars are the sensors inside the rear bumper for detecting the side/rear areas. Always keep the rear bumper clean for proper operation of the function.

**⚠ CAUTION**

- **The function may not work properly when the bumper has been damaged, or if the rear bumper has been replaced or repaired.**
- **The function may turn off due to strong electromagnetic waves.**

- **Always keep the sensors clean.**
- **NEVER arbitrarily disassemble the sensor component nor apply any impact on the sensor component.**
- **Be careful not to apply unnecessary force on the radar sensor or sensor cover. If the sensor is forcibly moved out of proper alignment, the Smart Recuperation System may not operate correctly. In this case, a warning message may not be displayed. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.**
- **Do not apply foreign objects such as a bumper sticker or a bumper guard near the radar sensor or apply paint to the sensor area. Doing so may adversely affect the performance of the sensor.**

■ Type A

OFE058150L

■ Type B

OTM070098N

### Blind-Spot Collision Warning (BCW) system disabled. Rear corner radar blocked

- This warning message may appear when:
  - One or both of the sensors on the rear bumper is blocked by dirt or snow or a foreign object.
  - Driving in rural areas where the sensor does not detect another vehicle for an extended period of time.
  - When there is inclement weather such as heavy snow or rain.

If any of these conditions occur, the light on the Blind-Spot Safety button and the function will turn off automatically.

When the radar blocked warning message is displayed in the cluster, check to make sure that the rear bumper is free from any dirt or snow in the areas where the sensor is located. Remove any dirt, snow, or foreign material that could interfere with the radar sensors.

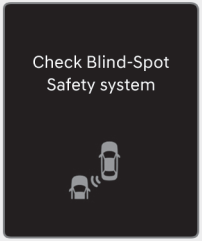
After any dirt or debris is removed, Rear Cross-Traffic Collision-Avoidance Assist should operate normally after about 10 minutes of driving the vehicle.

If the function still does not operate normally have your vehicle inspected by an authorized HYUNDAI dealer.

■ Type A

OFE058151L

■ Type B




OTM070099N

### Check Blind-Spot Collision Warning system

If there is a problem with Blind-Spot Collision-Avoidance Assist, a warning message will appear and the light on the switch will turn off.

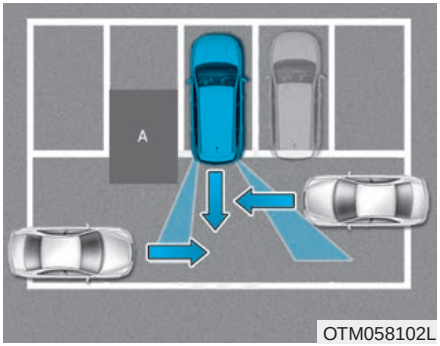
The function will turn off automatically. Rear Cross-Traffic Collision-Avoidance Assist will not operate also if Blind-Spot Collision-Avoidance Assist turns off due to malfunction. We recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

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

The driver must be cautious in the below situations, because the function may not detect other vehicles or objects in certain circumstances.

- When a trailer or carrier is installed.
- The vehicle drives in inclement weather such as heavy rain or snow.
- The sensor is polluted with rain, snow, mud, etc.
- The rear bumper where the sensor is located is covered with a foreign object such as a bumper sticker, a bumper guard, a bike rack, etc.
- The rear bumper is damaged, or the sensor is out of the original default position.
- The vehicle height gets lower or higher due to heavy loading in a trunk, abnormal tire pressure, etc.
- When the temperature of the rear bumper is high.

- When the sensors are blocked by other vehicles, walls or parking-lot pillars.
- The vehicle drives on a curved road.
- 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 a guardrail.
- While going down or up a steep road where the height of the lane is different.
- Driving on a narrow road where trees or grass or overgrown.
- Driving in rural areas where the sensor does not detect another vehicle for an extended period of time.
- Driving on a wet road.
- Driving on a road where the guardrail or wall is in double structure.
- A big vehicle is near such as a bus or truck.
- When the other vehicle approaches very close.
- When the other vehicle passes at a very fast speed.
- While changing lanes.
- If the vehicle has started at the same time as the vehicle next to you and has accelerated.
- When the vehicle in the next lane moves two lanes away from you or when the vehicle two lanes away moves to the next lane from you.
- A motorcycle or bicycle is near.
- A flat trailer is near.
- If there are small objects in the detecting area such as a shopping cart or a baby stroller.
- If there is a low height vehicle such as a sports car.
- The brake pedal is depressed.
- ESC (Electronic Stability Control) is activated.
- ESC (Electronic Stability Control) malfunctions.
- The tire pressure is low or a tire is damaged.
- The brake is reworked.
- The vehicle sharply stops.
- Temperature is extremely low around the vehicle.
- The vehicle severely vibrates while driving over a bumpy road, uneven/bumpy road, or concrete patch.
- The vehicle drives on a slippery surface due to snow, water puddle, or ice.



OTM058102L

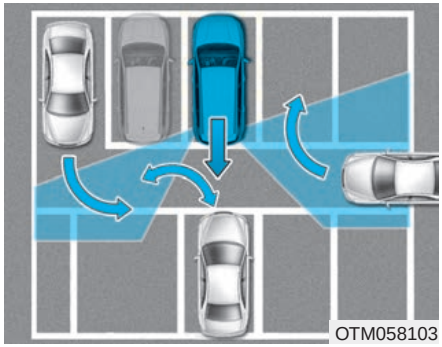
[A] : Structure

- Driving where there is a vehicle or structure near

The function may not operate properly when driving where there is a vehicle or structure near.

In certain instances, the function may not detect the vehicle approaching from behind and the warning or brake may not operate properly.

Always pay attention to your surrounding while driving.

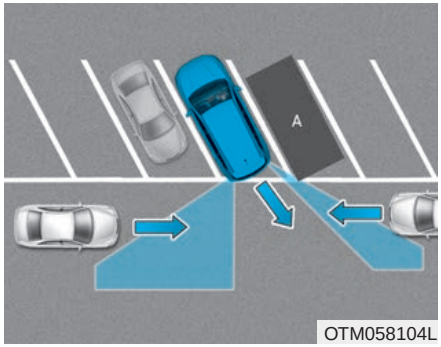

OTM058103

- When the vehicle is in a complex parking environment

The function may not operate properly when the vehicle is in a complex parking environment.

In certain instances, the function may not be able to exactly determine the risk of collision for the vehicles which are parking or pulling out near your vehicle (for example, a vehicle escaping beside your vehicle, a vehicle parking or pulling out in the rear area, a vehicle approaching your vehicle making a turn, etc.).

In this case, the warning or brake may not operate properly.



OTM058104L

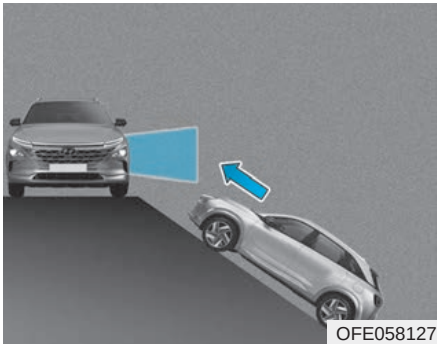
[A] : Vehicle

- When the vehicle is parked diagonally

The function may not operate properly when the vehicle is parked diagonally.

In certain instances, when the diagonally parked vehicle is pulled out of the parking space, the function may not detect the vehicle approaching from the rear left/right of your vehicle. In this case, the warning or brake may not operate properly.

Always pay attention to your surrounding while driving.

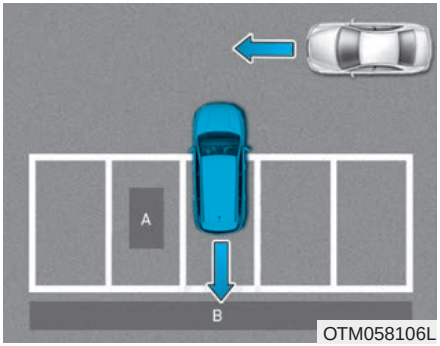

OFE058127

- When the vehicle is on/near a slope

The function may not operate properly when the vehicle is on/near a slope.

In certain instances, the function may not detect the vehicle approaching from the rear left/right and the warning or brake may not operate properly.

Always pay attention to your surrounding while driving.



OTM058106L

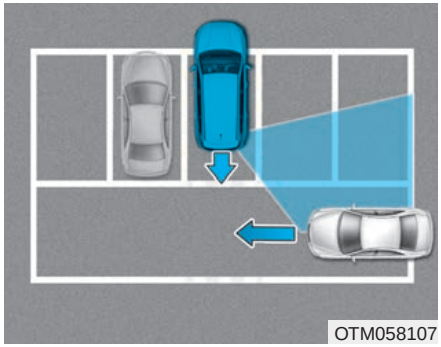
[A] : Structure, [B] : Wall

- Pulling into the parking space where there is a structure

The function may not operate properly when pulling in the vehicle to the parking space where there is a structure at the back or side of your vehicle.

In certain instances, when backing into the parking space, the function may not detect the vehicle moving in front of your vehicle. In this case, the warning or brake may not operate properly.

Always pay attention to the parking space while driving.


OTM058107

- When the vehicle is parked rearward

If the vehicle is parked rearward and the sensor detects the another vehicle in the rear area of the parking space, the function can warn or control braking. Always pay attention to the parking space while driving.

## Information

**This device complies with Part 15 of the FCC rules.**

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

1. **This device may not cause harmful interference.**
2. **This device must accept any interference received, including interference that may cause undesired operation.**

# DECLARATION OF CONFORMITY (IF EQUIPPED)

The radio frequency components complies:

## Front Radar

FCC ID
: 2ACDX-LRR-20
This device complies with Part 15 of the FCC Rules. 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.

CAUTION TO USERS
Changes or modifications not expressly approved by the party responsible for compliance could void the user`s authority to operate the equipment.

OANATEL125

## Rear Corner Radar (if equipped)

OANATEL002

This device complies with Part 15 of the FCC Rules. 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.

CAUTION TO USERS
Changes or modifications not expressly approved by the party responsible for compliance could void the user`s authority to operate the equipment.

OANATEL003

# SPECIAL DRIVING CONDITIONS

## Hazardous Driving Conditions

When hazardous driving elements are encountered such as water, snow, ice, mud and sand, take the bellow suggestions:

- Drive cautiously and keep a longer braking distance.
- Avoid abrupt braking or steering.
- When your vehicle is stuck in snow, mud, or sand, turn off the vehicle. Remove the mud, snow or sand from around the front wheels and restart the vehicle. 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 while the vehicle becomes stuck in ice, snow, or mud.

## 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 reduction gear 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 reduction gear is in gear. Slowly spinning the wheels in forward and reverse directions causes a rocking motion that may free the vehicle.

**⚠ WARNING**

**If the vehicle is stuck and excessive wheel spin occurs, the temperature in the tires can increase very quickly. If the tires become damaged, a tire blow out or tire explosion can occur. This condition is dangerous - you and others may be injured. Do not attempt this procedure if people or objects are anywhere near the vehicle.**

**If you attempt to free the vehicle, the vehicle can overheat quickly, possibly causing an fuel cell power module compartment fire or other damage. Try to avoid spinning the wheels as much as possible to prevent overheating of either the tires or the vehicle. DO NOT allow the vehicle to spin the wheels above 35 mph (56 km/h).**

### Information

**The ESC system (if equipped) must be turned OFF before rocking the vehicle.**

**NOTICE**

**If you are still stuck after rocking the vehicle a few times, have the vehicle pulled out by a tow vehicle to avoid vehicle overheating, possible damage to the reduction gear and tire damage. See "Towing" in chapter 6.**

## Smooth Cornering

Avoid braking, especially when roads are wet. Ideally, corners should always 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, as it may be more difficult to see at night, especially in areas where there may not be any street lights.
- Adjust your mirrors to reduce the glare from other driver's headlights.
- Keep your headlights clean and properly aimed. Dirty or improperly aimed headlights will make it much more difficult to see at night.
- Avoid staring directly at the headlights of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

## Driving in the Rain

Rain and wet roads can make driving dangerous. Here are a few things to consider 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.
- Be sure your tires have enough tread. If your tires do not have enough tread, making a quick stop on wet pavement can cause a skid and possibly lead to an accident. **See "Tire Tread" in chapter 7**.
- Turn on your headlights to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.

- If you believe your brakes may be wet, apply them lightly while driving until normal braking operation returns.

### *Hydroplaning*

If the road is wet enough and you are going 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, refer to "Tire Tread" in chapter 7.**

## Driving in Flooded Areas

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may 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, as specified. Under-inflation may overheat or damage the tires.

Do not install worn-out or damaged tires, which may reduce traction or fail the braking operation.

**Information**

**Never over-inflate your tires above the maximum inflation pressure, as specified on your tires.**

### *Coolant and high voltage battery*

Be sure to check both the coolant level and the high voltage battery level before driving.

## Reducing the Risk of a Rollover

Your multi-purpose passenger vehicle is defined as a Sports Utility Vehicle (SUV). SUV's 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 give them a higher center of gravity than ordinary vehicles making them more likely to roll over if you make abrupt turns. Utility vehicles have a significantly higher rollover rate than other types of vehicles. Due to this risk, driver and passengers are strongly recommended to buckle their seat belts. In a rollover crash, an unbelted person is significantly more likely to die 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**

**Utility vehicles 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.**

# WINTER DRIVING

The severe weather conditions of winter quickly wear out tires and cause other problems. To minimize winter driving problems, you should take the following suggestions:

## Snow or Icy Conditions

You need to keep sufficient distance between your vehicle and the vehicle in front of you.

Apply the brakes gently. Speeding, rapid acceleration, sudden brake applications, and sharp turns are potentially very hazardous practices. During deceleration, use regenerative braking to the fullest extent. 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. Some of the items you may want to carry include 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*

**⚠ 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.**

If you mount snow tires on your vehicle, make sure to use radial tires of the same size and load range 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.

**i Information**

**Do not install studded tires without first checking local, state and municipal regulations for possible restrictions against their use.**

### *Air cleaner filter (FCEV)*

The snow may block the air cleaner filter after driving the vehicle in heavy snow when the ambient temperature is below 50°F (10°C).

If a warning message "Air filter blocked. Check filter or see user manual" appears on LCD display after turning off the vehicle, remove the snow from the inside of the air cleaner filter and turn on and off the vehicle. If the warning message is displayed again, the exhaust pipe may be blocked. Then, move your vehicle indoors and leave it inside more than one day to defrost the exhaust pipe.

If the warning message is displayed again, have the vehicle checked by an authorized HYUNDAI dealer.

### *Tire chains*

OFE058102

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. Do not mount tire chains on vehicles equipped with aluminum wheels; if possible use a wire type chain. If tire chains must be used, use genuine HYUNDAI parts and install the tire chain 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.

**⚠ 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.**

**ℹ Information**

- **Install tire chains only in pairs and on the front tires. It should be noted that installing tire chains on the tires will provide a greater driving force, but will not prevent side skids.**
- **Do not install studded tires without first checking local, state 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)) 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 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 can damage your vehicle's brake lines, suspension, body and wheels.**
- **Use SAE "S" class or wire chains.**
- **If you hear noise caused by chains contacting the body, retighten the chain to prevent contact with the vehicle body.**
- **To prevent body damage, retighten the chains after driving 0.3~0.6 miles (0.5~1.0 km).**
- **Do not use tire chains on vehicles equipped with aluminum wheels. If unavoidable, use a wire type chain.**
- **Use wire chains less than 0.47 in (12 mm) thick to prevent damage to the chain's connection.**

## Winter Precautions

### *Use high quality ethylene glycol coolant*

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule in chapter 7. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

### *Use approved window washer anti-freeze in system*

To keep the water in the window washer system from freezing, add an approved window washer anti-freeze solution in accordance with instructions on the container. Window washer anti-freeze is available from an authorized HYUNDAI dealer and most auto parts outlets. Do not use coolant or other types of anti-freeze as these may damage the paint finish.

### *Do not let your parking brake freeze*

Under some conditions your parking brake can 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 if the brakes are wet. If there is a risk the parking brake may freeze, apply it only temporarily while you shift to P (Park) and block the rear wheels so the car cannot roll. Then release the parking brake.

### *Do not let ice and snow accumulate underneath*

Under some conditions, snow and ice can build up under the fenders and interfere with the steering. When driving in severe winter conditions where this may happen, you should periodically check underneath the car to be sure the movement of the front wheels and the steering components is not obstructed.

### *Don't place foreign objects or materials in the fuel cell power module compartment*

Placement of foreign object or materials which prevent cooling of the vehicle, in the fuel cell power module compartment, may cause a failure. The manufacturer is not responsible for the damage caused by such placement.

### *To keep locks from freezing*

To keep the locks from freezing, squirt an approved de-icer fluid or glycerine into the key opening. If a lock is covered with ice, squirt it with an approved de-icing fluid to remove the ice. If the lock is frozen internally, you may be able to thaw it out by using a heated key. Handle the heated key with care to avoid injury.

# 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 a full tank of fuel 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 and optional equipment.

### GAW (Gross Axle Weight)

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

### GAWR (Gross Axle Weight Rating)

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.

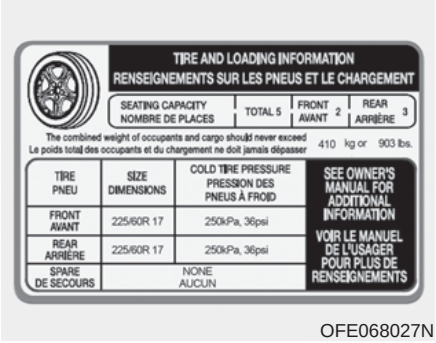
### GVW (Gross Vehicle Weight)

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

### GVWR (Gross Vehicle Weight Rating)

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.

## Tire Loading Information Label

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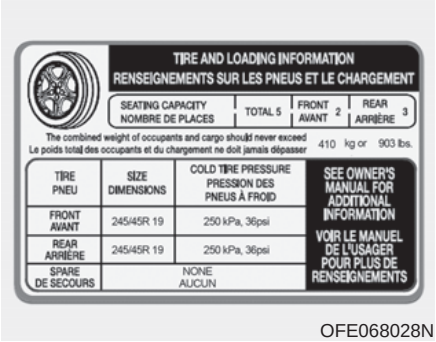


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The label located on the driver's door sill gives the original tire size, cold tire pressures recommended for your vehicle, the number of people that can be in your vehicle and vehicle capacity weight.

### *Vehicle capacity weight*

903 lbs. (410 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 : 5 persons
(Front seat : 2 persons,
Rear seat : 3 persons)

Seating capacity is the maximum number of occupants including a driver, 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 as there is a limit to the total weight, or load limit including occupants and cargo, the vehicle can carry.

### *Towing capacity*

We do not recommend using this vehicle for trailer towing.

### *Cargo capacity*

The cargo capacity of your vehicle will increase or decrease depending on the weight and 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 as there is a limit to the total weight, or load limit, including occupants and cargo, the vehicle can carry. Overloading can shorten the life of the vehicle. If the GVWR or the GAWR is exceeded, parts on the vehicle can be broken, and it can change the handling of your vehicle. These could cause you to lose control and result in an accident.**

| | | | | | |
|---|---|---|---|---|---|
| **Example 1** | Vehicle Capacity | ≥ | | + | |
| | Maximum Load<br>(1400 lbs.)<br>(635 kg) | | Passenger Weight<br>(150 lbs. × 2 = 300 lbs.)<br>(68 kg × 2 = 136 kg) | | Cargo Weight<br>(1100 lbs.)<br>(499 kg) |
| **Example 2** | Vehicle Capacity | ≥ | | + | |
| | Maximum Load<br>(1400 lbs.)<br>(635 kg) | | Passenger Weight<br>(150 lbs. × 5 = 750 lbs.)<br>(68 kg × 5 = 340 kg) | | Cargo Weight<br>(650 lbs.)<br>(295 kg) |
| **Example 3** | Vehicle Capacity | ≥ | | + | |
| | Maximum Load<br>(1400 lbs.)<br>(635 kg) | | Passenger Weight<br>(172 lbs. × 5 = 860 lbs.)<br>(78 kg × 5 = 390 kg) | | Cargo Weight<br>(540 lbs.)<br>(245 kg) |

### *Certification label*

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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 (Gross Vehicle Weight Rating). 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 Gross Axle Weight Rating (GAWR).

The total weight of the vehicle, including all occupants, accessories, cargo, and trailer tongue load must not exceed the Gross Vehicle Weight Rating (GVWR) or the Gross Axle Weight Rating (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**

**Overloading**

- **Never exceed the GVWR for your vehicle, the GAWR for either the front or rear axle and vehicle capacity weight. Exceeding these ratings can affect your vehicle's handling and braking ability, and cause an accident.**
- **Do not overload your vehicle. Overloading your vehicle can cause heat buildup in your vehicle's tires and possible tire failure, increased stopping distances and poor vehicle handling-all of which may result in a crash.**

**NOTICE**

**Overloading your vehicle may cause damage. Repairs would not be covered by your warranty. Do not overload your vehicle.**

**⚠ WARNING**

**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 crash, the items will keep going and can 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 tops of the seats.**
- **Do not leave an unsecured child restraint in your vehicle.**
- **When you carry something inside the vehicle, secure it.**

## TRAILER TOWING

**We do not recommend using this vehicle for trailer towing.**

# What to do in an emergency


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## HAZARD WARNING FLASHER

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The hazard warning flasher serves as a warning to other drivers to exercise extreme caution when approaching, overtaking, or passing your vehicle.

It should be used whenever emergency repairs are being made or when the vehicle is stopped near the edge of a roadway.

To turn the hazard warning flasher on or off, press the hazard warning flasher button. The button is located in the center fascia panel. Both the left and right turn signal lights will 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 AN EMERGENCY WHILE DRIVING

### If an accident occurs

1. Stop the vehicle, shift gear to the P (Park) position, engage the parking brake, and turn the vehicle off.

   The flow of hydrogen into the fuel cell stack will be shut off to prevent the electricity from being generated.
2. Evacuate to the safety place.
3. Call emergency services for help and let them know the vehicle is a Fuel Cell Electric Vehicle.

## If a fire occurs

1. Stop the vehicle, shift gear to the P(Park) position, engage the parking brake, and turn the vehicle off.

   The flow of hydrogen into the fuel cell stack will be shut off to prevent the electricity from being generated.

2. If the fire is small, which can be extinguished with fire extinguisher, use carbon dioxide extinguisher.

   You can also extinguish the fire with water when the vehicle power is turned off.

**⚠ WARNING**

**Do not use water to extinguish a fire when the vehicle power is turned on. Serious electric shock may result.**

If the fire is too big to be extinguished with the fire extinguisher, evacuate from the vehicle, call the fire department, and let them know the vehicle is a Fuel Cell Electric Vehicle. Do not come close to the vehicle until the fire is totally extinguished.

## Emergency venting of hydrogen gas

If the temperature near the safety valve located at the rear under vehicle is over 230°F (110°C) caused by a fire or other reasons, the safety valve will open to vent hydrogen gas. Venting the hydrogen gas makes a loud noise because the venting speed is very fast. Stay well away from the vehicle. The discharge of hydrogen gas from the vehicle is flammable and could cause a fire.

## If a submersion in water occurs

If your vehicle was flooded and has soaked carpeting or water on the flooring, you should not try to start the vehicle by pressing the POWER button.

Contact an authorized HYUNDAI dealer immediately.

## If the vehicle stalls at a crossroad or crossing

If the vehicle stalls at a crossroad or crossing, set the gear in the N (Neutral) position and then push the vehicle to a safe place.

### If you have a flat tire while driving

If a tire goes flat while you are driving:

1. Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause a loss of control. 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 firm, level ground. If you are on a divided highway, do not park in the median area between the two traffic lanes.
2. When the vehicle is stopped, turn on your emergency hazard flashers, set the parking brake and shift gear to the P(Park) position.
3. Have all passengers get out of the vehicle. Be sure they all get out on the side of the vehicle that is away from traffic.

### If the vehicle stalls while driving

1. Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
2. Turn on your emergency flashers.
3. Try to start the vehicle again. If your vehicle will not start, contact an authorized HYUNDAI dealer.

## IF THE VEHICLE WILL NOT START

- Be sure the shift lever is in P (Park). The vehicle starts only when the shift lever is in P (Park).
- This vehicle does not have a regular 12 V battery that needs periodic replacement. It is lithium ion polymer type integrated into the high voltage battery. The vehicle has a 12 V battery protection system that cuts 12 V battery from vehicle draw to prevent full discharge. If vehicle will not start, first try pressing the 12 V Battery Reset switch (left side of the steering wheel near the fuel door open switch) to reconnect the 12 V battery, but you must start vehicle within 15 seconds of pressing the 12 V Battery Reset switch. After starting vehicle, operate the vehicle safely outdoors in ready mode stopped and/or drive it for 30 minutes total to charge the 12 V battery fully.
- Check the fuel level and add fuel if necessary.
- Do not push or pull the vehicle to start it.

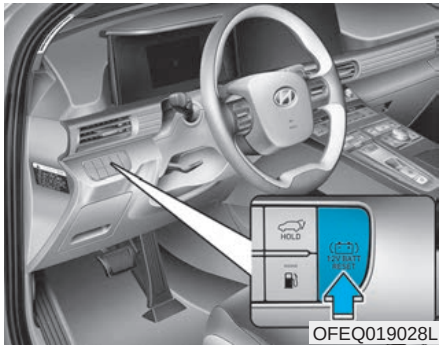
If the vehicle still does not start, call an authorized HYUNDAI dealer for

# IF THE 12 V BATTERY IS DISCHARGED

## Before Jump Starting

This vehicle does not have a regular 12 V battery that needs periodic replacement. It is lithium ion polymer type integrated into the high voltage battery. The vehicle has a 12 V battery protection system that cuts 12 V battery from vehicle draw to prevent full discharge.

### *Using the 12 V Battery Reset Switch*



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1. Press the 12 V Battery Reset switch to reconnect the 12 V battery.
2. Start the vehicle within 15 seconds of pressing the 12 V Battery Reset switch.
3. After starting vehicle ( indicator on), move the vehicle outside and keep the vehicle ready ( ) mode more than 30 minutes safely to charge the 12 V battery.

If you do not start the vehicle immediately after pressing the 12 V Battery Reset switch, the power of 12 V battery is automatically disconnected after few seconds to save the 12 V battery from additional discharge. If the 12 V battery is disconnected prior

to starting the vehicle, press the 12 V Battery Reset switch again and then immediately start the vehicle as explained.

Repeated use of the 12 V Battery Reset switch without a sufficient vehicle ON cycle (30 Min+) may cause over discharge of the 12 V battery, which will prevent the vehicle from starting. If the 12 V battery is over discharged to a point that the reset does not work, try to jump-start the vehicle.

### *i* Information

**After starting the vehicle ( indicator on), the 12 V battery is being charged whether the accelerator pedal is depressed or not.**

The following items may need to be reset after the battery has been discharged or the battery has been disconnected. See chapter 3 or 4 for:

- Power Windows
- Trip Computer
- Climate Control System
- Clock
- Audio System
- Sunroof
- Driver Position Memory System

**NOTICE**

**External power source using 12 V battery**

**The use of external power accessories may reduce performance and function of the vehicle. Especially, the use of dash cameras may shut off the power of the vehicle prior to the dash camera's automatic shut-down.**

**If the power of the vehicle is shut off, start the vehicle as explained. (refer to "Using the 12 V Battery Switch")**

## Jump Starting

In the event vehicle still does not have a functional 12 V battery (check if interior lights will not turn on) then you can try a jump start using a 12 V booster pack or jumper cables from another vehicle's 12 V battery according to the following instructions.

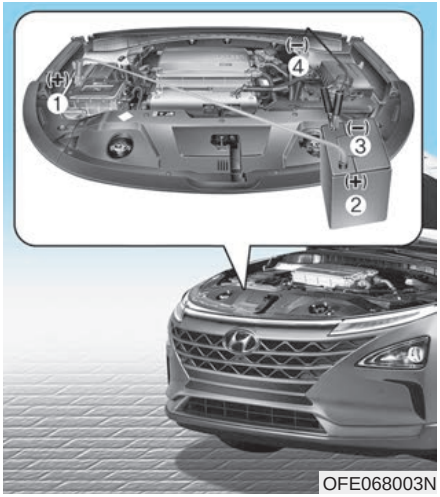
**⚠ CAUTION**

**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, we strongly recommend that you have a service technician or towing service do it for you.**

1. Position the vehicles close enough that the jumper cables will reach, but do not allow the vehicles to touch.
2. Avoid fans or any moving parts in the fuel cell power module compartment at all times, even when the vehicles are turned off.
3. Turn off all electrical devices such as radios, lights, air conditioning, etc. Put the vehicles in P (Park) and set the parking brake. Turn both vehicles OFF.

**⚠ CAUTION**

**Before jump starting, make sure to correctly identify the positive (+) and negative (-) terminals to avoid reverse polarity connections.**



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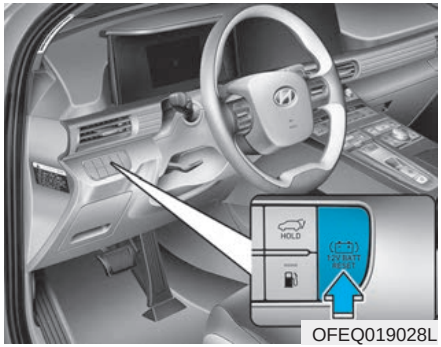
4. Connect the jumper cables in the exact sequence shown in the illustration. First connect one jumper cable to the red, positive (+) jumper terminal of your vehicle (1).
5. Connect the other end of the jumper cable to the red, positive (+) battery/jumper terminal of the assisting vehicle (2).
6. Connect the second jumper cable to the black, negative (-) battery/jumper terminal of the assisting vehicle (3).
7. Connect the other end of the second jumper cable to the black, negative (-) chassis ground of your vehicle (4).

   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.

**⚠ WARNING**

**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.**



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8. Press the 12 V Battery Reset switch.
9. Start the engine of the assisting vehicle and let it run for a few minutes.
10. Start your vehicle as soon as possible. After starting vehicle ( indicator on), operate the vehicle safely outdoors in ready mode stopped and/or drive it for 30 minutes total to charge the 12 V battery fully.

If your vehicle will not start after a few attempts, it probably requires servicing. In this event please seek qualified assistance. If the cause of your battery discharging is not apparent, have your vehicle checked by an authorized HYUNDAI dealer.

Disconnect the jumper cables in the exact reverse order you connected them:

1. Disconnect the jumper cable from the black, negative (-) chassis ground of your vehicle (4).
2. Disconnect the other end of the jumper cable from the black, negative (-) battery/chassis ground of the assisting vehicle (3).
3. Disconnect the second jumper cable from the red, positive (+) battery/jumper terminal of the assisting vehicle (2).
4. Disconnect the other end of the jumper cable from the red, positive (+) jumper terminal of your vehicle (1).

### Information

**The voltage range of the charger should be 13.3~14V and its current range should be less than 60A. (13.8V is recommended).**

### CAUTION

- **The use of an improper charger with a voltage and current range higher than specified may cause overheating and damage to the 12 V battery.**
- **The use of an incorrect charger will lead to a power shut-off to save the 12 V battery. Stop using the incorrect charger once the power of the vehicle is shut off.**

### Information

**An inappropriately disposed battery can be harmful to the environment and human health. Dispose of the battery according to your local law(s) or regulations.**

### NOTICE

**To prevent damage to your vehicle:**

- **Only use a 12-volt power supply (battery or jumper system) to jump start your vehicle.**
- **Do not attempt to jump start your vehicle by push-starting.**

### CAUTION

**Do not jump start another vehicle with your hybrid vehicle. Jump starting another vehicle will damage the hybrid vehicle's 12 volt battery (lithium polymer type).**

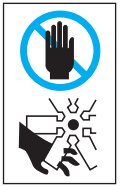
### WARNING

**While jump starting your vehicle, avoid the positive (+) and negative (-) cables to come in contact. A spark could cause personal injury.**

## IF THE VEHICLE OVERHEATS

1. Pull off the road and stop as soon as it is safe to do so.
2. Shift to P (Park) and set the parking brake. If the air conditioning is on, turn it off.
3. If coolant is running out under the vehicle or steam is coming out from the hood, stop the vehicle. Do not open the hood until the coolant has stopped running or the steaming has stopped. If there is no visible loss of coolant and no steam, leave the vehicle running and check to be sure the vehicle cooling fan is operating. If the fan is not running, turn the vehicle off.

**⚠ WARNING**



**While the vehicle is running, keep hands, clothing and tools away from the moving parts such as the cooling fan to prevent serious injury.**

4. Check for coolant leaking from the radiator, hoses or under the vehicle. (If the air conditioning had been in use, it is normal for cold water to be draining from it when you stop.)
5. If coolant is leaking out, stop the vehicle immediately and call the nearest authorized HYUNDAI dealer for assistance.

**⚠ WARNING**

**Your vehicle is equipped with a pressurized coolant reserve tank. NEVER remove the coolant reserve tank cap or the radiator drain plug while the radiator is HOT. Hot coolant and steam may blow out under pressure, causing serious injury.**

**Turn the vehicle off and wait until the vehicle cools down. Use extreme care when removing the coolant reserve tank cap. Wrap a towel or thick rag around it, and turn it counterclockwise slowly to release some of the pressure from the system. Step back while the pressure is released.**

**When you are sure all the pressure has been released, continue turning the cap counterclockwise to remove it.**

6. If you cannot find the cause of the overheating, wait until the radiator temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
7. Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, call an authorized HYUNDAI dealer for assistance.

**⚠ CAUTION**

**Serious loss of coolant indicates a leak in the cooling system and should be checked as soon as possible by an authorized HYUNDAI dealer.**

# TIRE PRESSURE MONITORING SYSTEM (TPMS)

OFE068004

OFE061021N

(1) Low Tire Pressure / TPMS Malfunction Indicator Lamp

(2) Low Tire Pressure / Tire Pressure Monitor / TPMS Malfunction Display (shown on the cluster display)

## Check Tire Pressure

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- You can check the tire pressure in the information mode on the cluster.

  **Refer to the "Cluster Display Mode" section in chapter 3.**

- A "Drive to display" message will appear for the first few minutes of driving after initial vehicle start up.

  If the tire pressure is not displayed after a few minutes of driving, check the tire pressures.

- The displayed tire pressure values may differ from those measured with a tire pressure gage.
- You can change the tire pressure unit in the General Settings mode on the Infotainment system.
  - **psi, kpa, bar (For more details, refer to the separately supplied Navigation manual.)**

## Tire Pressure Monitoring System

**⚠ WARNING**

**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 accident.**

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 tire pressure monitoring system (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.

Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

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.

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 will flash for approximately one minute and then remain continuously illuminated. This sequence will continue 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.

**NOTICE**

**If any of the below happens, have the system checked by an authorized HYUNDAI dealer.**

1. **The Low Tire Pressure TPMS Malfunction Indicator does not illuminate for 3 seconds when the POWER button is placed to the ON position or vehicle is ON ( indicator ON).**
2. **The TPMS Malfunction Indicator remains illuminated after blinking for approximately 1 minute.**
3. **The Low Tire Pressure LCD display remains illuminated**

## Low Tire Pressure Telltale

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## Low Tire Pressure Position Telltale and Tire Pressure Telltale

When the tire pressure monitoring system warning indicators are illuminated and the warning message is displayed on the cluster display, one or more of your tires is significantly under-inflated. The Low Tire Pressure position indicator will indicate which tire is significantly under-inflated by illuminating the corresponding parking light.

If any of your tire pressures are indicated as being low, immediately reduce your speed, avoid hard cornering, and anticipate increased stopping distances. You should 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.

The Low Tire Pressure position indicator will remain on and the TPMS Malfunction Indicator may blink for one minute and then remain illuminated until you have the low pressure tire repaired and replaced on the vehicle.

**⚠ CAUTION**

**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, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.**

**⚠ WARNING**

**Low pressure damage**

**Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.**

**Continued driving on low pressure tires can cause the tires to overheat and fail.**

## TPMS Malfunction Indicator

The TPMS Malfunction Indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System.

Have the system checked by an authorized HYUNDAI dealer as soon as possible.

***NOTICE***

**If there is a malfunction with the TPMS, the individual tire pressures in the cluster LCD display will not be available. Have the system checked by an authorized HYUNDAI dealer as soon as possible.**

**NOTICE**

**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 electronic devices such as computers, chargers, remote starters, navigation, etc. 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 indicator will come on. Have the flat tire repaired by an authorized HYUNDAI dealer as soon as possible.

**⚠ CAUTION**

**Never use a puncture-repairing agent not approved by HYUNDAI dealer to repair and/or inflate a low pressure tire. Tire sealant not approved by HYUNDAI dealer may damage the tire pressure sensor.**

Once the original tire equipped with a tire pressure monitoring sensor is reinflated to the recommended pressure and reinstalled on the vehicle, the Low Tire Pressure position indicator and TPMS Malfunction Indicator will go off within a few minutes of driving.

If the indicators do not disappear after a few minutes, please visit an authorized HYUNDAI dealer.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem. 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 identify a tire with low pressure by simply looking at it. Always use a good quality tire pressure gage to measure the tire's inflation pressure. Please note that a tire that is hot (from being driven) will have a higher pressure measurement than a tire that is cold.

A cold tire means the vehicle has been sitting for 3 hours and driven for less than 1 mile (1.6 km) in that 3 hour period.

Allow the tire to cool before measuring the inflation pressure. Always be sure the tire is cold before inflating to the recommended pressure.

**⚠ WARNING**

- **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, apply the brakes gradually with light force, and slowly move to a safe position off the road.**

**⚠ WARNING**

**Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.**

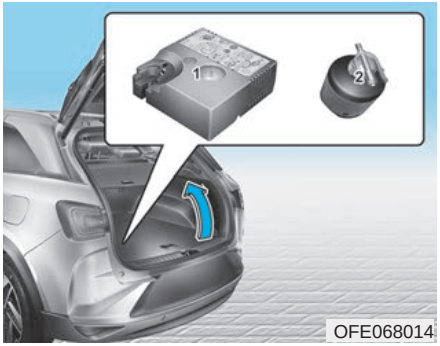
### *i* Information

**This device complies with Part 15 of the FCC rules.**

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

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

## IF YOU HAVE A FLAT TIRE (WITH TIRE MOBILITY KIT)




For safe operation, carefully read and follow the instructions in this manual before use.

(1) Compressor

(2) Sealant bottle

The Tire Mobility Kit is a temporary fix to the tire and the tire should be inspected by an authorized HYUNDAI dealer as soon as possible.

**⚠ 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.**

**⚠ WARNING**

**Do not use the Tire Mobility Kit to repair punctures in the tire walls. This can result in an accident due to tire failure.**

**⚠ WARNING**

**Have your tire repaired as soon as possible. The tire may lose air pressure at any time after inflating with the Tire Mobility Kit.**

### *Introduction*

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 ensure that the tire is properly sealed you can drive cautiously on the tire (distance up to 120 miles (200 km)) at a max. speed of (50 mph (80 km/h)) in order to reach a service station or tire dealer for the 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.

This instruction shows you step by step how to temporarily seal the puncture simply and reliably.

Read the section "Notes on the safe use of the Tire Mobility Kit".

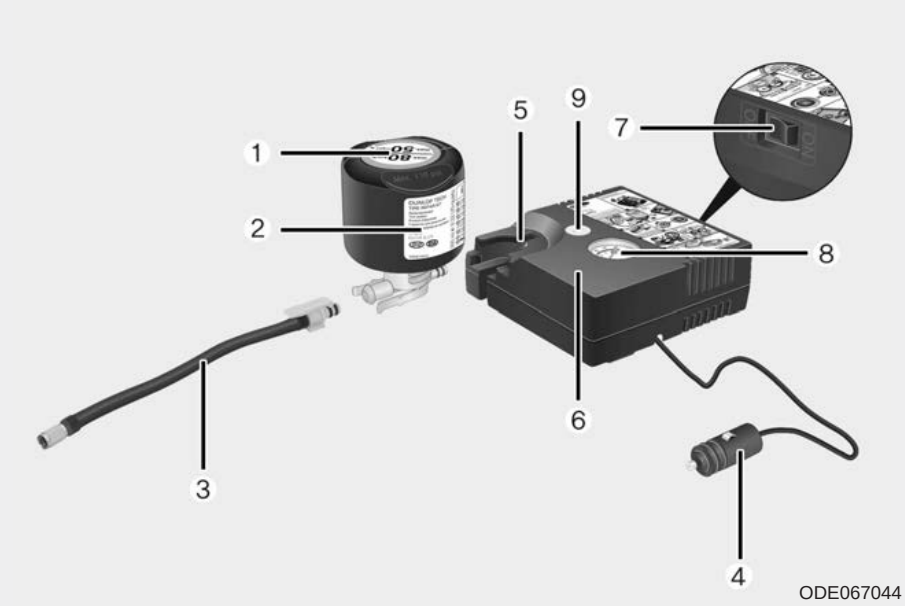
### *Notes on the safe use of the Tire Mobility Kit*

- Park your car 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 will not move, even when you're on fairly level ground, always set 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 for your safety.
- Use of the Tire Mobility Kit may not be effective for tire damage larger than approximately 0.16 in. (4 mm).

  Please contact the nearest HYUNDAI dealership 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.
- Do not remove any foreign objects such as nails or screws that have penetrated the tire.
- Provided the car is outdoors, leave the vehicle ON ( indicator ON). 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 ofwater. However, never give anythingto 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*




1. Speed restriction label
2. Sealant bottle and label with speed restriction
3. Sealant/Air filling hose
4. Connectors and cable for power outlet direct connection
5. Holder for the sealant bottle
6. Compressor
7. ON/OFF switch
8. Pressure gauge for displaying the tire inflation pressure
9. Button for reducing tire inflation pressure

Connectors, cable and connection hose are stored in the compressor housing.

Strictly follow the specified sequence, otherwise the sealant may escape under high pressure.

**⚠ WARNING**

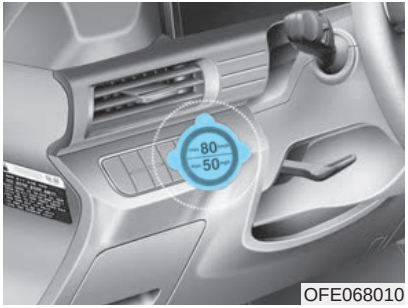
**Do not use the tire sealant after the sealant has expired (for example, pasted the expiration date on the sealant container). This can increase the risk of tire failure.**

**⚠ WARNING**

- **Keep out of reach of children.**
- **Avoid contact with eyes.**
- **Do not swallow.**

### *Using the Tire Mobility Kit*

**⚠ CAUTION**



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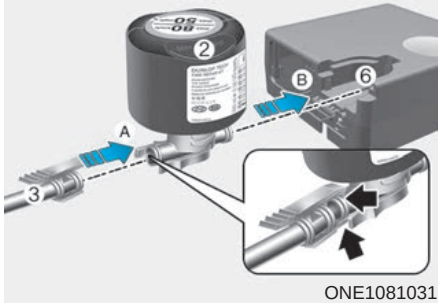
**Detach the speed restriction label (1) from the sealant bottle (2), and place it in a highly visible place inside the vehicle such as on the steering wheel to remind the driver not to drive too fast.**

1. Shake the sealant bottle (2).



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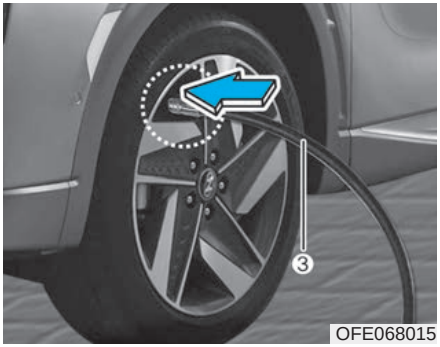
2. Connect the filling hose (3) to the sealant bottle (2) in the direction of (A) and connect the sealant bottle to the compressor (6) in the direction of (B).
3. Ensure that the compressor is switched OFF.



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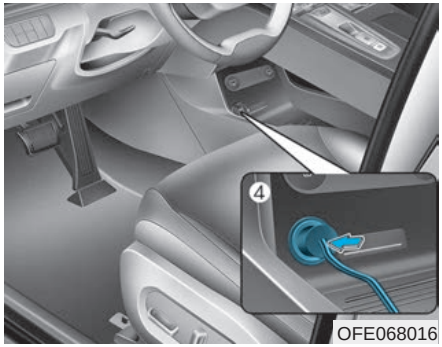
4. Unscrew the valve cap from the valve of the defective wheel and screw the filling hose (3) of the sealant bottle onto the valve.

**⚠ CAUTION**

**Securely install the sealant filling hose to the valve. If not, sealant may flow backward, possibly clogging the filling hose.**



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5. Plug the compressor power cord (4) into the vehicle power outlet.
6. With the vehicle ON ( indicator ON), switch on the compressor and let it run for approximately 5~7 minutes to fill the sealant up to proper pressure. (refer to the Tire and Wheels, chapter 8). The inflation pressure of the tire after filling is unimportant and will be checked/corrected later.

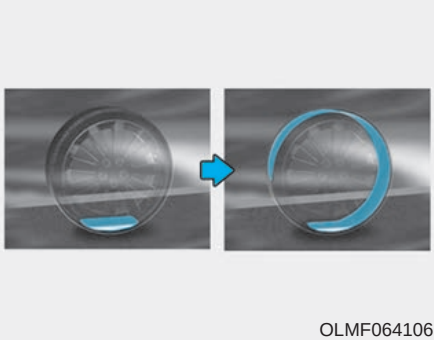
   Be careful not to overinflate the tire and stay away from the tire when filling it.

**⚠ CAUTION**

**Do not attempt to drive your vehicle if the tire pressure is below 29 psi (200 kpa). This could result in an accident due to sudden tire failure.**

7. Switch off the compressor.
8. 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.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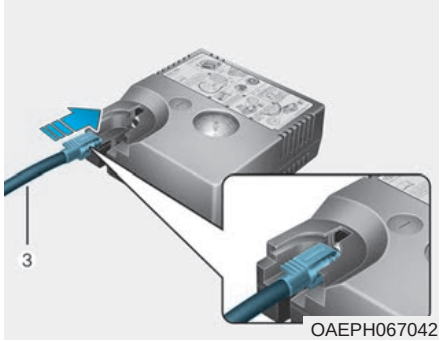
### Distributing the sealant

9. Immediately drive approximately 4~6 miles (7~10 km or about 10 minutes) to evenly distribute the sealant in the tire.

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.

10. After driving approximately 4~6 miles (7~10 km or about 10 minutes), stop at a safe location.



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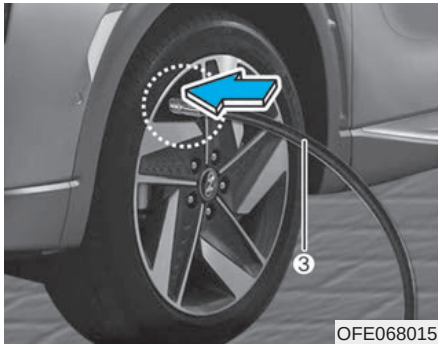

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11. Connect the other end of the filling hose (3) directly into the tire valve.
12. Plug the compressor power cord into the vehicle power outlet.

13. Adjust the tire inflation pressure to the recommended tire inflation.

    With the vehicle ON ( indicator ON), on, 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 (9) on the compressor.

### Information

**The pressure gauge may show higher than actual reading when the compressor is running. To get an accurate tire pressure, the compressor needs to be turned off.**

### CAUTION

**When you use the Tire Mobility Kit including sealant not approved by HYUNDAI, the tire pressure sensors may be damaged by sealant.**

**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 at an authorized dealer.**

### WARNING

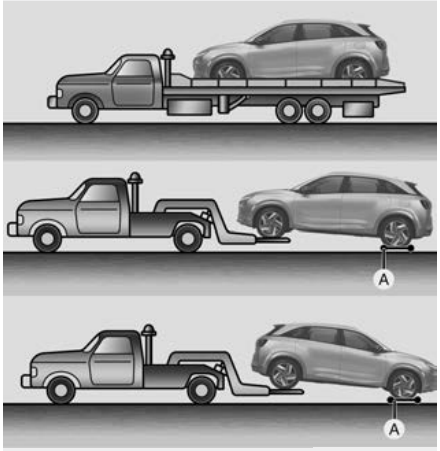
**The tire inflation pressure must be at least 32 psi (220 kPa). If it is not, do not continue driving. Call for road side service or towing.**

### Information

**When reinstalling the repaired or replaced tire and wheel on the vehicle, tighten the wheel lug nut to 79~94 lbf·ft (11~13 kgf·m).**

# TOWING

## Towing Service

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[A] : Dollies

If emergency towing is necessary, have it done by an authorized HYUNDAI dealer or a commercial tow-truck service. Proper lifting and towing procedures are necessary to prevent damage to the vehicle. The use of wheel dollies or flatbed is recommended.

It is acceptable to tow the vehicle with the rear wheels on the ground (without dollies) and the front wheels off the ground. If any of the loaded wheels or suspension components are damaged or the vehicle is being towed with the front wheels on the ground, use a towing dolly under the front wheels.

When being towed by a commercial tow truck and wheel dollies are not used, the front of the vehicle should always be lifted, not the rear.

**NOTICE**

- **Do not tow the vehicle with the front wheels on the ground as this may cause damage to the vehicle.**

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- **Do not tow with sling-type equipment. Use a wheel lift or flatbed equipment.**

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**⚠ WARNING**

**If your vehicle is equipped with a rollover sensor, place the POWER button in the LOCK/ OFF or ACC position when the vehicle is being towed. The side impact and curtain air bag may deploy if the sensor detects the situation as a rollover.**

When towing your vehicle in an emergency without wheel dollies:

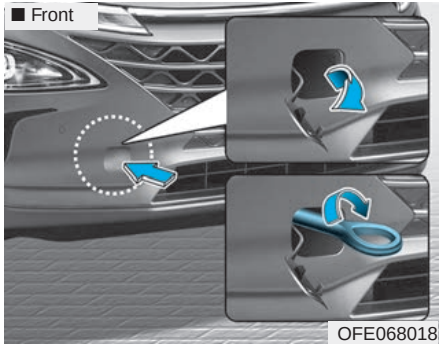
1. Place the POWER button in the ACC position.
2. Place the shift button in N (Neutral).
3. Release the parking brake.

**⚠ CAUTION**

**Failure to place the shift button in N (Neutral) when being towed with the front wheels on the ground can cause internal damage to the vehicle.**

## Removable Towing Hook

1. Open the liftgate, and remove the towing hook from the tool case.



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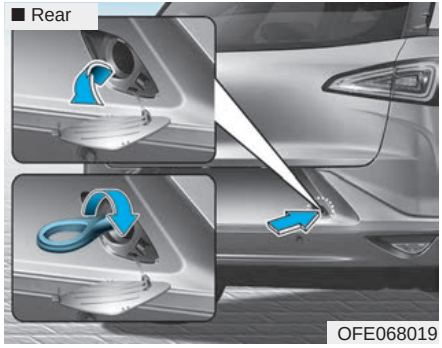

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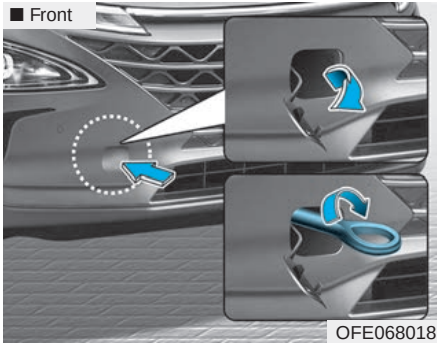
2. Remove the hole cover by pressing the cover on the front or rear bumper.
3. Install the towing hook by turning it clockwise into the hole until it is fully secured.
4. Remove the towing hook and install the cover after use.

## Emergency Towing

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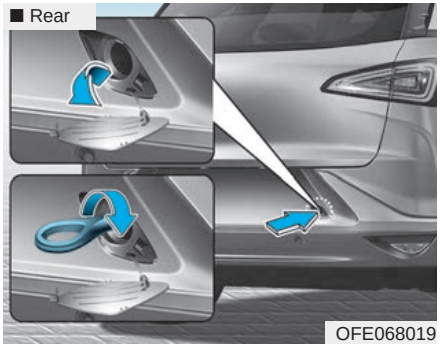


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If towing is necessary, have it done by an authorized HYUNDAI dealer or a commercial tow truck service.

If towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook at the front (or rear) of the vehicle.

Use extreme caution when towing the vehicle with a cable or chain. A driver must be in the vehicle to steer it and operate the brakes.

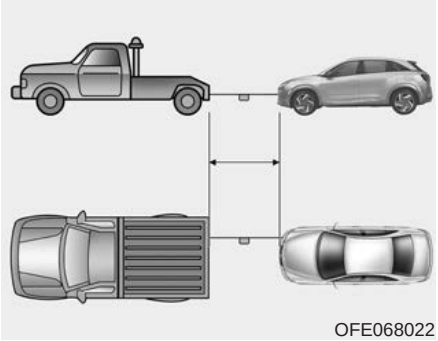
Towing in this manner may be done only on hard-surfaced roads for a short distance and at low speeds. Also, the wheels, axles, power train, steering and brakes must all be in good condition.

Always follow these emergency towing precautions:

- While depressing the brake pedal shift to the N (Neutral) position and turn the vehicle off. The POWER button will be in the ACC position.
- Release the parking brake.
- Depress the brake pedal with more force than normal since you will have reduced braking performance.
- More steering effort will be required because the power steering system will be disabled.
- Use a vehicle heavier than your own to tow your vehicle.
- The drivers of both vehicles should communicate with each other frequently.
- Before emergency towing, check that the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and even force.

**⚠ CAUTION**

**The driver must be in the vehicle for steering and braking operations when the vehicle is being towed. Passengers other than the driver must not be in the vehicle.**



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- Use a towing cable or chain less than 16 feet (5 m) long. Attach a white or red cloth (about 12 inch (30 cm) wide) in the middle of the cable or chain for easy visibility.
- Drive carefully so the towing cable or chain remains tight during towing.
- Before towing, check the reduction gear for fluid leaks under your vehicle. If the reduction gear is leaking, flatbed equipment or a towing dolly must be used.

***NOTICE***

**Accelerate or decelerate the vehicle in a slow and gradual manner while maintaining tension on the tow rope or chain to start or drive the vehicle, otherwise tow hooks and the vehicle may be damaged.**

***NOTICE***

**To avoid damage to your vehicle and vehicle components when towing:**

- **Always pull straight ahead when using the towing hooks. Do not pull from the side or at a vertical angle.**
- **Do not use the towing hooks to pull a vehicle out of mud, sand or other conditions from which the vehicle cannot be driven out under its own power.**
- **Limit the vehicle speed to 10 mph (15 km/h) and drive less than 1 mile (1.5 km) when towing to avoid serious damage to the reduction gear.**

# Maintenance


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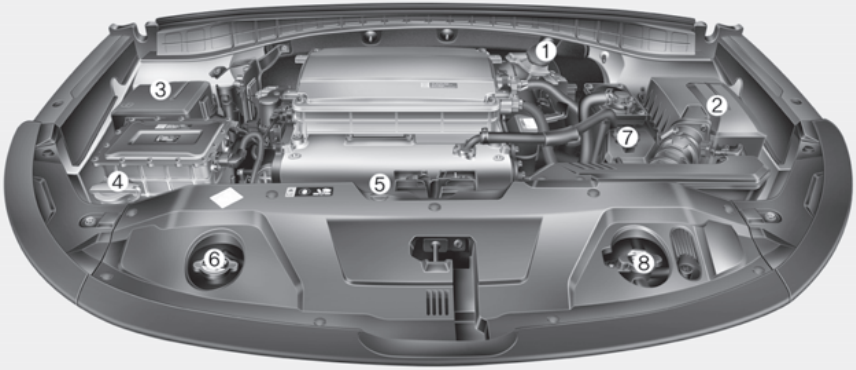
# FUEL CELL POWER MODULE COMPARTMENT OVERVIEW




1. Brake fluid reservoir
2. Air cleaner
3. Fuse box
4. Windshield washer fluid reservoir
5. Device cooling coolant reservoir
6. Traction motor radiator cap
7. Stack cooling coolant reservoir
8. Fuel cell stack radiator cap

**The actual fuel cell power module compartment in the vehicle may differ from the illustration.**

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# MAINTENANCE SERVICES

You should 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.

**⚠ WARNING**

**High voltage caution**

**Do not disassemble or perform maintenance on the fuel cell system unless you are qualified. The fuel cell system can be highly dangerous since there are many high voltage parts inside even if when power is off.**

## Owner's Responsibility

Maintenance service and record retention are the owner's responsibility.

You should retain documents that show proper maintenance has been performed on your vehicle in accordance with the scheduled maintenance service charts shown 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 lead to vehicle damage, an accident, or personal injury. This chapter provides instructions only for the maintenance items that are easy to perform. Several procedures can be done only by an authorized HYUNDAI dealer with special tools.

Your vehicle should 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.

Certain modifications may also be in violation of regulations established by the U.S. Department of Transportation and other federal or state agencies.

## OWNER MAINTENANCE

**NOTICE**

**Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Owner's Handbook & Warranty Information booklet provided with the vehicle. If you're unsure about any service or maintenance procedure, have it done by an authorized HYUNDAI dealer.**

**⚠ WARNING**

**Performing maintenance work on a vehicle can be dangerous. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have it done by an authorized HYUNDAI dealer.**

**ALWAYS follow these precautions for performing maintenance work:**

- **Park your vehicle on level ground, shift to the P (Park) position, apply the parking brake, and place the POWER button in 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.**
- **Keep flames, sparks, or smoking materials away from the battery related parts.**

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, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your 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.

## Owner maintenance schedule

***When you stop for fuel:***

- Check for both fuel cell stack and Device cooling coolant level in coolant reservoir.
- Check the windshield washer fluid level.
- Look for low or under-inflated tires.

**⚠ WARNING**

**Be careful when checking the coolant level when the fuel cell power module is hot. Scalding hot coolant and steam may blow out under pressure. This could cause burns or other serious injury.**

***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 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 reduction gear occurs, check the reduction gear fluid level.
- Check the reduction 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 coolant level in the coolant reservoir.
- Check the operation of all exterior lights, including the brake lights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires that are worn, show uneven wear, or are damaged.
- Check for loose wheel lug nuts.

***At least twice a year:***
***(for example, every Spring and Fall)***

- Check radiator, heater and air conditioning hoses for leaks or damage.
- Check windshield washer spray and wiper operation. Clean wiper blades with clean cloth dampened with washer fluid.
- Check headlight alignment.
- Check the seat belts for wear and function.

***At least once a year:***

- Clean body and door drain holes.
- Lubricate door hinges and hood hinges.
- Lubricate door and hood locks and latches.
- Lubricate door rubber weather strips.
- Lubricate door checker.
- Check the air conditioning system.
- Inspect and lubricate reduction gear linkage and controls.
- Check the brake fluid level.

## SCHEDULED MAINTENANCE SERVICES

Follow Normal Maintenance Schedule if the vehicle is usually operated where none of the following conditions apply. If any of the following conditions apply, you must follow the Maintenance Under Severe Usage Conditions.

- Repeated driving short distance of less than 5 miles (8 km) in normal temperature or less than 10 miles (16 km) in freezing temperature
- Low speed driving for long distances
- Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads
- Driving in areas using salt or other corrosive materials or in very cold weather
- Driving in heavy dust condition
- Driving in heavy traffic area
- Driving on uphill, downhill, or mountain road repeatedly
- Towing a trailer or using a camper, or roof rack
- Driving as a patrol car, taxi, other commercial use of vehicle towing
- Driving over 106 mph (170 km/h)
- Frequently driving in stop-and-go condition

*If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After the periods or distance shown in the chart, continue to follow the prescribed maintenance intervals.*

## Normal Maintenance Schedule

| Maintenance Intervals / Maintenance Item | Months | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 | 156 | 168 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Miles×1,000 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 |
| | Km×1,000 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |
| Hydrogen sensor | | | I | | I | | I | | I | | I | | I | | I | |
| Hydrogen system (Check the hydrogen leakage) | | Inspect every 6,000 miles (10,000 km) or 24 months | | | | | | | | | | | | | | |
| Air cleaner filter | | Replace every at 12,000 (20,000 km) miles | | | | | | | | | | | | | | |
| Device cooling coolant | | At first, replace at 120,000 miles (200,000 km) or 10 years : Thereafter, replace every 30,000 miles (48,000 km) or 24 months | | | | | | | | | | | | | | |
| Stack cooling coolant | | Replace every at 36,000 miles (60,000 km) or 36 months | | | | | | | | | | | | | | |
| Ion filter | | Replace every at 36,000 miles (60,000 km) or 36 months | | | | | | | | | | | | | | |
| Reduction gear | | No check, No service required | | | | | | | | | | | | | | |
| Air conditioner refrigerant/ compressor | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Brake lines, hoses and connections | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Brake discs and pads | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Driveshaft and boots | | | I | | I | | I | | I | | I | | I | | I | |
| Front suspension ball joints | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |

I : Inspect and if necessary, adjust, correct, clean or replace.
R : Replace

## Normal Maintenance Schedule (Cont.)

| Maintenance Intervals / Maintenance Item | Months | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 | 156 | 168 | 180 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Miles×1,000 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 |
| | Km×1,000 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 |
| Parking brake | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Steering gear rack, linkage and boots | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Tire (pressure & tread wear) | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Battery condition | | I | I | I | I | I | I | I | I | I | I | I | I | I | I | I |
| Brake fluid | | Inspect every 15,000 miles (24,000 km) or 12 months, Replace every 60,000 miles (96,000 km) or 48 months | | | | | | | | | | | | | | |
| Climate control air filter | | R | R | R | R | R | R | R | R | R | R | R | R | R | R | R |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace

## Maintenance Under Severe Usage Conditions

The following items must be serviced more frequently on cars normally used under severe driving conditions. Refer to the chart below for the appropriate maintenance intervals.

R : Replace  I : Inspect and, after inspection, clean, adjust, repair or replace if necessary

| Maintenance item | Maintenance operation | Maintenance intervals | Driving condition |
|---|---|---|---|
| Hydrogen system<br>(Check the hydrogen leakage) | I | Inspect more frequently depending on the condition | C, D, F, G, J, L |
| Air cleaner filter | I | Inspect more frequently depending on the condition | C, D, E |
| Device cooling coolant | R | Replace more frequently depending on the condition | C, D, E, F, J, K, L |
| Stack cooling coolant | R | Replace more frequently depending on the condition | C, D, F, G, L |
| Ion filter | R | Replace more frequently depending on the condition | C, D, F, G, L |
| Reduction gear fluid | R | 72,000 miles (120,000 km) | C, F, G, I, J |
| Air conditioner refrigerant/compressor | I | Inspect more frequently depending on the condition | C, D, F, G, L |
| Disc brakes and pads, calipers and rotors | I | Inspect more frequently depending on the condition | C, D, E, G, H |

| Maintenance item | Maintenance operation | Maintenance intervals | Driving condition |
|---|---|---|---|
| Driveshaft and boots | I | Inspect more frequently depending on the condition | C, D, E, F, G, H, I, J |
| Front suspension ball joints | I | Inspect more frequently depending on the condition | C, D, E, F, G |
| Parking brake | I | Inspect more frequently depending on the condition | C, D, G, H |
| Steering gear rack, linkage and boots | I | Inspect more frequently depending on the condition | C, D, E, F, G |
| Climate control air filter | R | Replace more frequently depending on the condition | C, E |

### Severe driving conditions

A - Repeatedly driving short distances of less than 5 miles (8 km) in normal temperature or less than 10 miles (16 km) in freezing temperature
B - Extensive low speed driving for long distances
C - Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads
D - Driving in areas using salt or other corrosive materials or in very cold weather
E - Driving in sandy areas
F - Driving in heavy traffic area over 90°F (32°C)
G - Driving on uphill, downhill, or mountain road
H - Towing a Trailer, or using a camper, or roof rack
I - Driving as a patrol car, taxi, other commercial use or vehicle towing
J - Driving over 106 mph (170 km/h)
K - Frequently driving in stop-and-go conditions

# EXPLANATION OF SCHEDULED MAINTENANCE ITEMS

## Hydrogen System

Check Hydrogen system components in contact with hydrogen, such as hydrogen tank, hydrogen supply system parts and hydrogen leak sensors, for hydrogen leakage and damage. Replace any damaged parts.

## Cooling System

Check cooling system components, such as radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

## Coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

## Reduction Gear Fluid

Inspect the reduction gear fluid according to the maintenance schedule.

## Brake Hoses and Lines

Visually check for proper installation, chafing, cracks, deterioration and any leakage. Replace any deteriorated or damaged parts immediately.

## Brake Fluid

Check brake fluid level in the brake fluid reservoir. The level should be between the MIN and the MAX marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

## Brake Discs, Pads, Calipers and Rotors

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

## 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 freeplay in the steering wheel. Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. Replace any damaged parts.

## Drive Shafts and Boots

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

## Air Conditioning Refrigerant

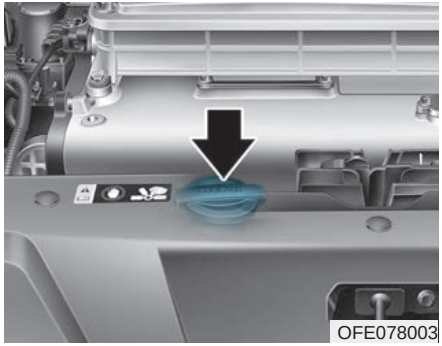
Check the air conditioning lines and connections for leakage and damage.

## DEVICE COOLING COOLANT

The high-pressure cooling system has a reservoir filled with year-round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season and before traveling to a colder climate.

### Checking the Coolant Level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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 rear side of the coolant reservoir when the parts in the fuel cell power module compartment is cool.
If the coolant level is low, add enough distilled (deionized) water to bring the level to the MAX mark, but do not overfill. If frequent additions are required, you see an authorized HYUNDAI dealer for a cooling system inspection.

***Recommended coolant***

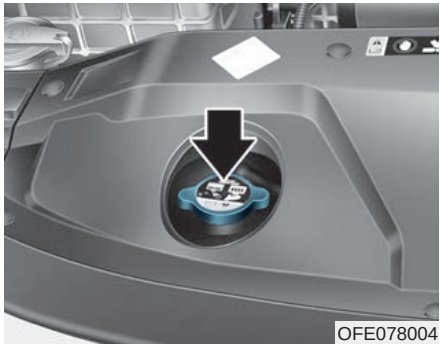
- When adding coolant, use only distilled (deionized) water for your vehicle and never mix hard water in the coolant filled at the factory.
- An improper coolant mixture can result in severe malfunction or electric devices damage.
- Do not use alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixing percentage, refer to the following table:

| Ambient Temperature | Mixture Percentage (volume) | |
|---|---|---|
| | Antifreeze | Water |
| 5°F (-15°C) | 35 | 65 |
| -13°F (-25°C) | 40 | 60 |
| -31°F (-35°C) | 50 | 50 |
| -49°F (-45°C) | 60 | 40 |

## Information

**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 and higher.**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## WARNING

**Never remove the radiator cap or the drain plug while the radiator is hot. Hot coolant and steam may blow out under pressure, causing serious injury.**

**Turn the vehicle off and wait until the parts in the fuel cell power module compartment cools down. Use extreme care when removing the radiator 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.**

**⚠ WARNING**

**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.**

The electric motor for the cooling fan is controlled by coolant temperature, refrigerant pressure and vehicle speed. As the coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.

## Changing Coolant

Have coolant changed by an authorized HYUNDAI dealer according to the Maintenance Schedule at the beginning of this chapter.

**⚠ WARNING**

**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***

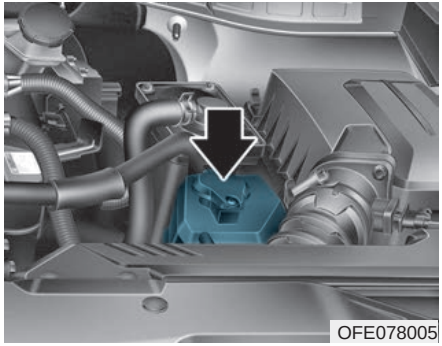
**To prevent damage to parts in the fuel cell power module compartment, put a thick towel around the coolant cap before refilling the coolant to prevent the coolant from overflowing into parts in the fuel cell power module compartment.**

# STACK COOLING COOLANT

The high-pressure cooling system has a reservoir filled with year-round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season and before traveling to a colder climate.

## Checking the Coolant Level



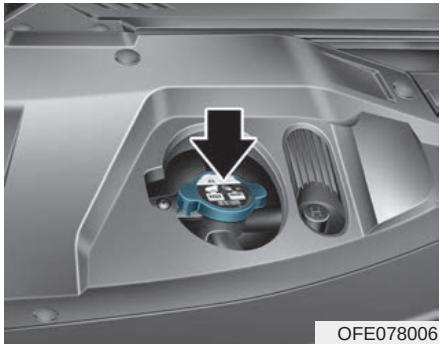

Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.
When replacing any part of the cooling system there may be loss of coolant. In that case, fill with an exclusive coolant for the fuel cell. When replacing the ion filter cartridge, replace the whole stack coolant.
The coolant level should be filled between F (MAX) and L (MIN) marks on the side of the coolant reservoir when the fuel cell power module is cool.

If the stack cooling coolant level is low, add enough exclusive coolant for fuel cell stack to provide protection against freezing and corrosion in the authorized HYUNDAI dealer.

In addition, whenever replacing the ion filter cartridge, add enough exclusive coolant for fuel cell stack.

### *Stack cooling coolant*

- When adding stack cooling coolant, use only exclusive coolant for fuel cell stack in authorized HYUNDAI dealer and never mix any water or liquid.
- An improper coolant mixture can result in severe malfunction or electric devices damage.
- If the vehicle is damaged by adding unspecified liquid except exclusive coolant for fuel cell stack, it will not be covered by the warranty.


OFE078006

**⚠ WARNING**

**Never remove the radiator cap or the drain plug while the radiator is hot. Hot coolant and steam may blow out under pressure, causing serious injury.**

**Turn the vehicle off and wait until the parts in the fuel cell power module compartment cools down. Use extreme care when removing the 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.**

**⚠ WARNING**

**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.**

The electric motor for the cooling fan is controlled by coolant temperature, refrigerant pressure and vehicle speed. As the coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.

## Changing Coolant

For the fuel cell stack, an exclusive coolant must be used . When changing the fuel cell stack coolant, have that coolant be changed by an authorized HYUNDAI dealer according to the Maintenance Schedule at the beginning of this chapter.

**⚠ WARNING**

**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 parts in the fuel cell power module compartment, put a thick towel around the coolant cap before refilling the coolant to prevent the coolant from overflowing into parts in the fuel cell power module compartment.**

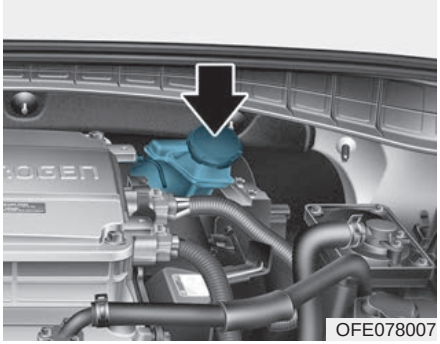
**⚠ CAUTION**

**Do not mix-up the caps of device cooling coolant and stack cooling coolant because the fluid material is different. If the cap is mixed, the fuel cell system may be damage.**

**Have you consult an authorized HYUNDAI dealer.**

# BRAKE FLUID

## Checking the Brake Fluid Level


OFE078007

Check the fluid level in the reservoir periodically. The fluid level should be between MAX and 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. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings. If the fluid level is excessively low, have the brake system checked by an authorized HYUNDAI dealer.

**⚠ WARNING**

**If the brake system requires frequent additions of fluid this could indicate a leak in the brake system. Have the vehicle inspected by an authorized HYUNDAI dealer.**

**⚠ WARNING**

**Do not let brake fluid enter into your eyes. If brake fluid gets in your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention.**

**NOTICE**

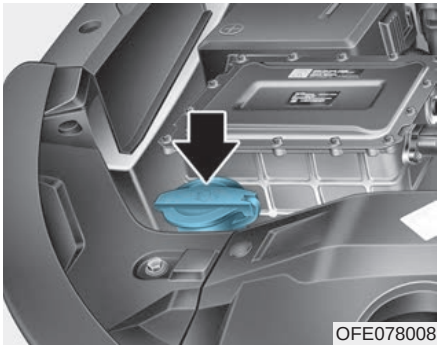
- **Do not allow brake fluid to contact the vehicle's body paint, as it will result in paint damage.**
- **NEVER use brake fluid which has been exposed to open air for an extended time, as its quality cannot be guaranteed. It should be disposed of properly.**
- **Do not use the wrong type of brake fluid. A few drops of mineral based oil such as engine oil, in your brake system can damage brake system parts.**

### Information

**Use only the specified brake fluid (refer to "Recommended Lubricants and Capacities" in chapter 8).**

# WASHER FLUID

## Checking the Washer Fluid Level


OFE078008

Check the fluid level in the washer fluid reservoir and add fluid if necessary. Plain water may be used if washer fluid is not available. However, use washer solvent with antifreeze characteristics in cold climates to prevent freezing.

**⚠ WARNING**

**To prevent serious injury or death, take the following safety precautions when using washer fluid:**

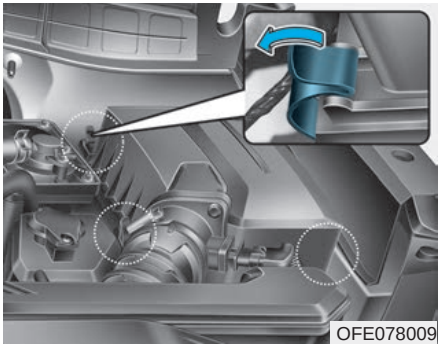
- **Do not use coolant or antifreeze in the washer fluid reservoir.**

  **Coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control resulting in an accident or damage to paint and body trim.**
- **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. Washer fluid is harmful to humans and animals.**
- **Keep washer fluid away from children and animals.**

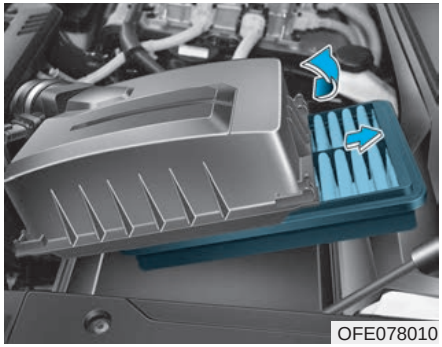
# AIR CLEANER

## Filter Replacement

Faulty air cleaner filter has a direct influence on reduction of the stack output, etc. Replace the filter according to the maintenance schedule.




1. Loosen the air cleaner cover attaching clips and open the cover.




2. Wipe the inside of the air cleaner.
3. Replace the air cleaner filter.
4. Lock the cover with the cover attaching clips.
5. Check that the cover is firmly installed.

## Information

**If the vehicle is operated in extremely dusty or sandy areas, replace the air cleaner filter more often than the usual recommended intervals (refer to "Maintenance Under Severe Usage Conditions" in this chapter).**

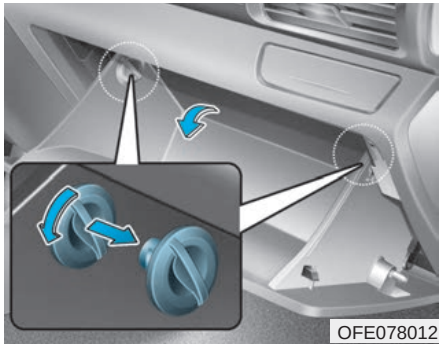
### CAUTION

- **Do not drive with the air cleaner filter removed. This will result in excessive wear.**
- **When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.**
- **Use HYUNDAI genuine parts, use of non-genuine parts could damage the air flow sensor.**

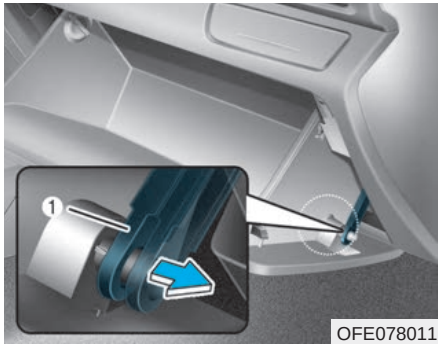
# CLIMATE CONTROL AIR FILTER

## Filter Inspection

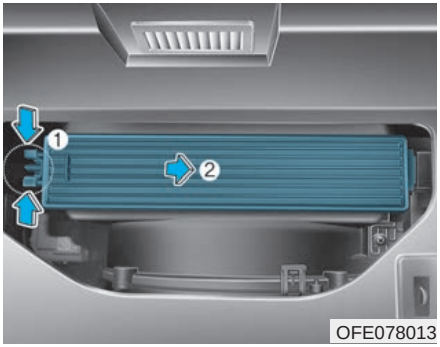
The climate control air filter should be replaced according to the Maintenance Schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.




1. With the glove box open, remove the stoppers on both sides to allow the glove box to hang freely on the hinges.




2. Remove the support rod (1).



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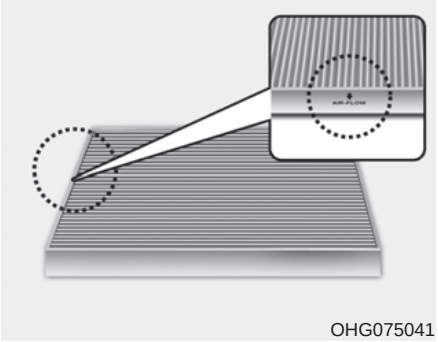
3. Press and hold the lock (1) on left side of the cover.
4. Pull out (2) the cover.


OHG075041

5. Replace the climate control air filter.
6. Reassemble in the reverse order of disassembly.

**NOTICE**

**Install a new climate control air filter in the correct direction with the arrow symbol (↓) facing downwards. Otherwise, the climate control effects may decrease, possibly with a noise.**

# WIPER BLADES

## Blade Inspection

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wiper functionality. Common sources of contamination are insects, tree sap, and hot wax treatments used by some commercial car washes. If the blades are not wiping properly, clean both the window and the blades with a clean cloth dampened with washer fluid.

**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.**
- **Use non-specified wiper blades.**

### Information

**Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.**

## Blade Replacement

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

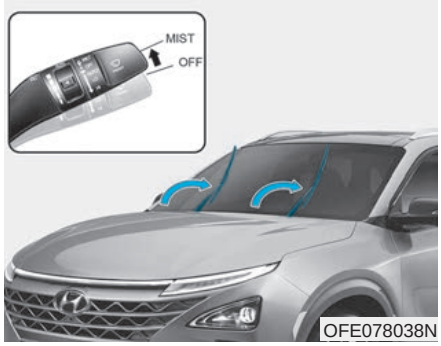
**NOTICE**

**To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.**

**NOTICE**

**The use of a non-specified wiper blade could result in wiper malfunction and failure.**

### *Front windshield wiper service positions*

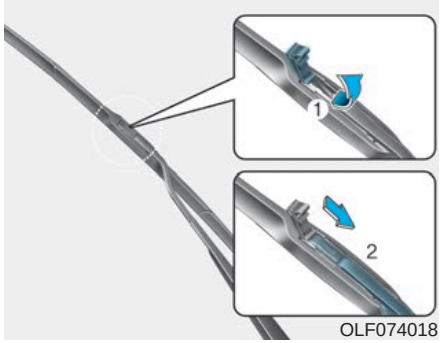



This vehicle has a "hidden" wiper design which means that the wipers cannot be lifted when they are in their bottom resting position.

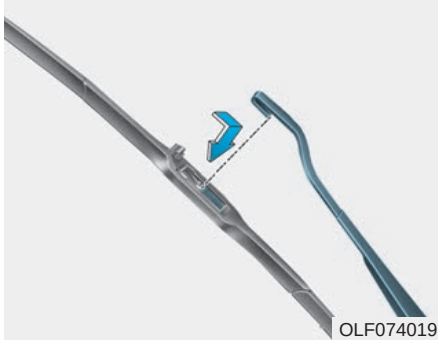
1. Within 20 seconds of turning off the vehicle, lift and hold the wiper lever up to the MIST position for about 2 seconds until the wipers move to the top wipe position.
2. At this time you can lift the wipers off the windshield.
3. Gently put the wipers back down onto the windshield.
4. Turn the wipers to any ON position to return the wipers to the bottom resting position.

### *Front windshield wiper blade replacement*

1. Raise the wiper arm.




2. Lift up the wiper blade clip. Then pull down the blade assembly and remove it.




3. Install the new blade assembly in the reverse order of removal.
4. Return the wiper arm on the windshield.

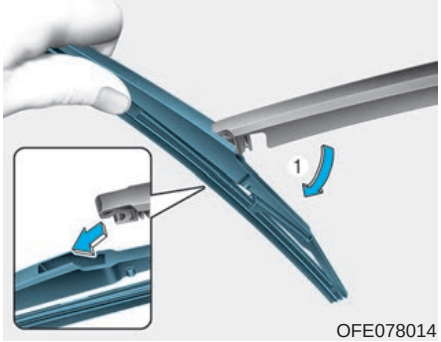
**⚠ CAUTION**

**To prevent damage to the wiper arms or other components, have an authorized HYUNDAI dealer replace the wiper blade.**

### *Rear window wiper blade replacement*

OFE078016

1. Operate the rear windshield wiper to make sure the blade is on lower position. Then turn off the vehicle.



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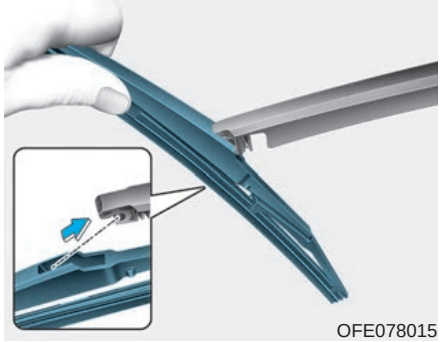
2. Raise the wiper arm (1) and pull out the wiper blade assembly.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3. Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.
4. Make sure the blade assembly is installed firmly by trying to pull it slightly.

To prevent damage to the wiper arms or other components, we recommend that the wiper blades be replaced by an authorized HYUNDAI dealer.

## 12V BATTERY

The vehicle is not equipped with a common 12V battery which requires periodic replacement. The battery is a lithium polymer type integrated into the high voltage battery. Full discharge of the battery is prevented through 12V battery protection system which can isolate the 12V battery.

**⚠ WARNING**

**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.**

- **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 ON ( indicator ON) or when the POWER button is in the ON position.**

***NOTICE***

**Always follow these instructions when handling your vehicle's battery to prevent damage to your battery:**

- **If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.**

## Battery recharging

### *By RESET button*

OFEQ019028L

To charge the discharged 12V battery, attempt charging by pressing 12V BATT RESET button. For more details, refer to “If the 12 volt battery is discharged” in chapter 6.

### *By jump starting*

After a jump start from a good battery, drive the vehicle for 20-30 minutes before it is shutoff. The vehicle may not restart if you shut it off before the battery had a chance to adequately recharge. See “Jump Starting” in chapter 6 for more information on jump starting procedures.

## Reset Features

Some items need to be reset after the battery has been discharged or the battery has been disconnected. See chapter 3 for:

- Power Windows
- Trip Computer
- Climate Control System
- Clock
- Audio System
- Sunroof
- Driver Position Memory System

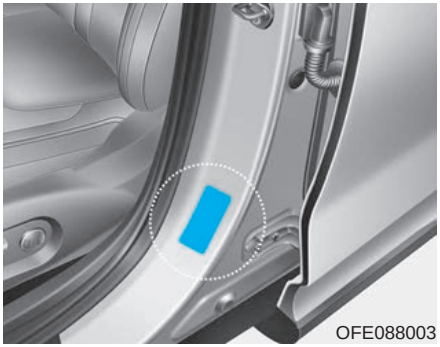
**⚠ WARNING**

**Tire failure may cause loss of vehicle control resulting in an accident. To reduce risk of SERIOUS INJURY or DEATH, take the following precautions:**

- **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.**
- **Replace tires that are worn, show uneven wear, or are damaged. Worn tires can cause loss of braking effectiveness, steering) control, or 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 could cause unusual handling characteristics, poor vehicle control, or negatively affect your vehicle's Anti-Lock Brake System (ABS) resulting in a serious accident.**

## Tire Care

For proper maintenance, safety, and maximum fuel economy, you must always maintain 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.

## Recommended Cold Tire Inflation Pressures

All tire pressures should be checked when the tires are cold. "Cold tires" means the vehicle has not been driven for at least three hours or driven less than one mile (1.6 km).

Warm tires normally exceed recommended cold tire pressures by 4 to 6 psi (28 to 41 kPa). Do not release air from warm tires to adjust the pressure or the tires will be under-inflated. For recommended inflation pressure, refer to "Tire and Wheels" in chapter 8.

**⚠ 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 could result in loss of vehicle control resulting in an accident.**

**Severe under-inflation can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control resulting in an accident. This risk is much higher on hot days and when driving for long periods at high speeds.**

**⚠ CAUTION**

- **Under-inflation results in excessive wear, poor handling and reduced fuel economy. Wheel deformation is also possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, have it checked 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.**

## Check Tire Inflation Pressure

Check your tires once a month or more.

### *How to check*

Use a good quality tire pressure gauge to check tire pressure. You can not tell if your tires are properly inflated simply by looking at them. Radial tires may look properly inflated when they are under-inflated.

Remove the valve cap from the tire valve stem. 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 you reach the recommended pressure. Make sure to put the valve caps back on the valve stems. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

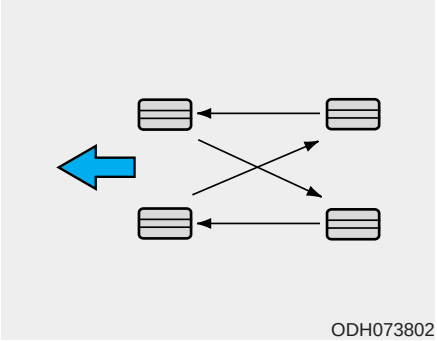
If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

## Tire Rotation

To equalize tread wear, HYUNDAI recommends that the tires be rotated every 6,000 miles (10,000 km) or sooner if irregular wear develops.

During rotation, check the tires for correct balance.

When rotating tires, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tire pressure, improper wheel alignment, out-of-balance wheels, severe braking or severe cornering. Look for bumps or bulges in the tread or side of tire. Replace the tire if you find either of these conditions. Replace the tire if fabric or cord is visible. After rotation, be sure to bring the front and rear tire pressures to specification and check lug nut tightness (proper torque is 79~94 lbf·ft [11~13 kgf·m]).




Disc brake pads should be inspected for wear whenever tires are rotated.

### Information

**Tires that are asymmetrical or directional can only be installed on the wheel in one direction. The outside and inside of an asymmetrical tire is not easily distinguishable. Pay careful attention to the markings on the sidewalls of the tires, noting the "outside" marking and also the rotating direction before installing them on the vehicle.**

### WARNING

**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 resulting in an accident.**

## Wheel Alignment and Tire Balance

The wheels on your vehicle were aligned and balanced carefully at the factory to give you the longest tire life and best overall performance.

In most cases, you will not need to have your wheels aligned again. However, if you notice unusual tire wear or your vehicle pulling one way or the other, the alignment may need to be reset.

If you notice your vehicle vibrating when driving on a smooth road, your wheels may need to be rebalanced.

**NOTICE**

**Improper wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.**

## Tire Replacement

If the tire is worn evenly, a tread wear indicator will appear as a solid band across the tread. This shows there is less than 1/16 inch (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.

**⚠ WARNING**

**To reduce the risk of DEATH or SERIOUS INJURY:**

- **Replace tires that are worn, show uneven wear, or are damaged. Worn tires can 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 could cause unusual handling characteristics, poor vehicle control, or negatively affect your vehicle's Anti-Lock Brake System (ABS) resulting in a serious accident.**

- **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 of normal service.**
- **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 can seriously affect your vehicle's handling.**
- **Heat caused by hot climates or frequent high loading conditions can accelerate the aging process. Failure to follow this warning may cause sudden tire failure, which could lead to a loss of vehicle control resulting in an accident.**

## 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 Traction

Tire traction can be reduced if you drive on worn tires, tires that are improperly inflated or on slippery road surfaces. Tires should be replaced when tread wear indicators appear. To reduce the possibility of losing control, slow down whenever there is rain, snow or ice on the road.

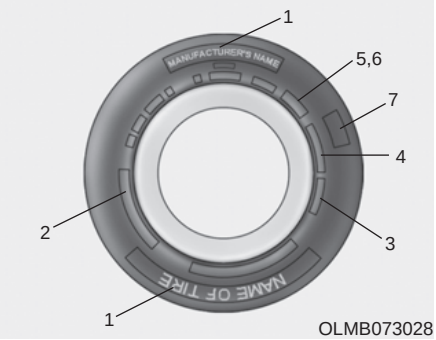
## Tire Maintenance

In addition to proper inflation, correct wheel alignment helps to decrease 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 will increase vehicle ride comfort and tire life. Additionally, a tire should always be rebalanced if it is removed from the wheel.

## 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.



OLMB073028

### *1. Manufacturer or brand name*

Manufacturer or brand name is shown.

### *2. Tire size designation*

A tire's sidewall is marked with a tire size designation. You will need this information when selecting replacement tires for your car. The following explains what the letters and numbers in the tire size designation mean.

Example tire size designation:

(These numbers are provided as an example only; your tire size designator could vary depending on your vehicle.)

**225/60 R17 99H**

225 - Tire width in millimeters.

60 - Aspect ratio. The tire's section height as a percentage of its width.

R - Tire construction code (Radial).

17 - Rim diameter in inches.

99 - Load Index, a numerical code associated with the maximum load the tire can carry.

H - 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. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

**7.0J x 17**

7.0 - Rim width in inches.

J - Rim contour designation.

17 - Rim diameter in inches.

### Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger car tires. 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) |
| T | 118 mph (190 km/h) |
| H | 130 mph (210 km/h) |
| V | 149 mph (240 km/h) |
| W | 168 mph (270 km/h) |
| Y | 186 mph (300 km/h) |

### *3. Checking tire life (TIN : Tire Identification Number)*

Any tires that are over six years old, based on the manufacturing date, should 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 DOT Code is a series of numbers on a tire consisting of numbers and English letters. The manufacturing date is designated by the last four digits (characters) of the DOT code.

**DOT : XXXX XXXX OOOO**

The front part of the DOT means a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

For example:

DOT XXXX XXXX 1523 represents that the tire was produced in the 15th week of 2023.

### *4. Tire ply composition and material*

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.

### *5. 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.

### *6. 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.

### *7. Uniform tire quality grading*

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.

For example:

TREAD wear 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 with respect to 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.

**⚠ WARNING**

**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 can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. Grade C responds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109. Grades B and A 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, can cause heat build-up and possible sudden tire failure. This may cause loss of vehicle control resulting in an accident.**

## 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 reduction gear, 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 light-weight 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 pounds (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 lb. (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 inch 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.

## 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. Snow tires have better snow traction than all season tires and may be more appropriate in some areas.

## 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. If you plan to operate your vehicle in snowy or icy conditions, HYUNDAI recommends the use of snow tires or all season tires on all four wheels.

## Snow Tires

If you equip your car with 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 on the driver's side of the 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.

## 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: Identical pairs of radial-ply tires should always be used as a set for the front tires and a set for the 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.

**⚠ WARNING**

**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 resulting in an accident.**

## Low Aspect Ratio Tires

Low aspect ratio tires, the aspect ratio is lower than 50, are provided for sporty looks.

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**

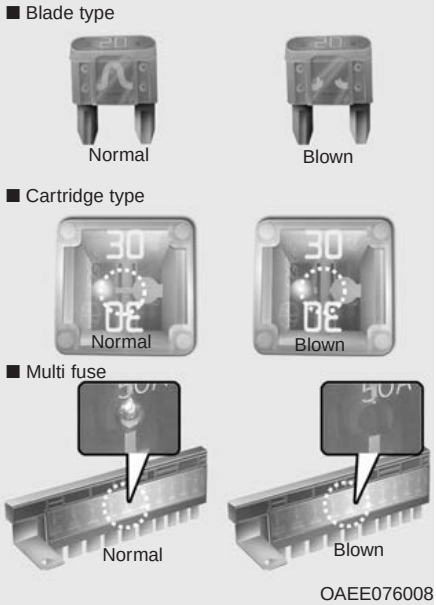
**Because the sidewall of a low aspect ratio tire is shorter than a standard tire, the rim of the wheel and the tire itself is more easily susceptible to damage. Use caution when driving and follow the guidelines below to help minimize damage to the wheel and tire:**

- **When driving on a rough road or off road, drive cautiously because tires and wheels may be damaged. And after driving, inspect tires and wheels.**
- **When passing over a pothole, speed bump, manhole, or curb stone, drive slowly so that the tires and wheels are not damaged.**
- **If the tire is subjected to a severe impact, have the tire and wheel inspected by an authorized HYUNDAI dealer.**
- **Inspect the tire condition and pressure every 1,800 miles (3,000 km).**

**⚠ CAUTION**

- **It is not easy to recognize tire damage with your own eyes. But if there is the slightest hint of tire damage, have the tire checked or replaced because the tire damage may cause air leakage from the tire.**
- **If the tire is damaged by driving on a rough road, off road, pothole, manhole, or curb stone, it will not be covered by the warranty.**

# 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 fuel cell power module compartment near the battery.

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 will be melted or broken.

If the electrical system does not work, first check the driver's side fuse panel. Before replacing a blown fuse, turn the vehicle and all switches off, and then disconnect the negative battery cable. Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized HYUNDAI dealer.

## Information

**Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and multi fuse for higher amperage ratings.**

## WARNING

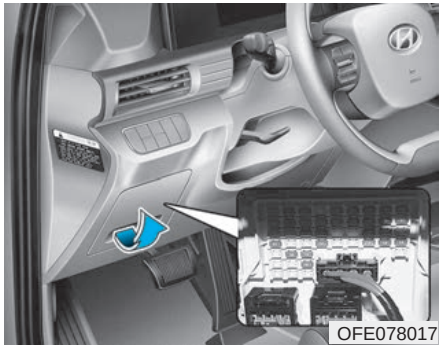
**NEVER replace a fuse with anything but another fuse of the same rating.**

- **A higher capacity fuse could 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.**

**NOTICE**

**Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.**

## Instrument Panel Fuse Replacement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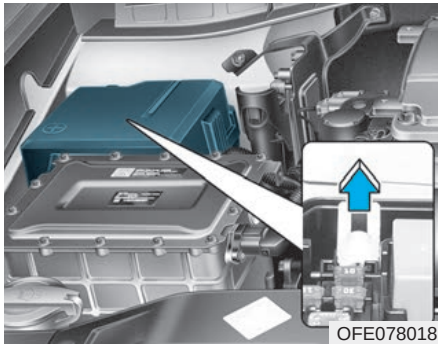
1. Turn the vehicle off.
2. Turn all other switches OFF.
3. Open the fuse panel cover.
4. Refer to the label on the inside of the fuse panel cover to locate the suspected fuse location.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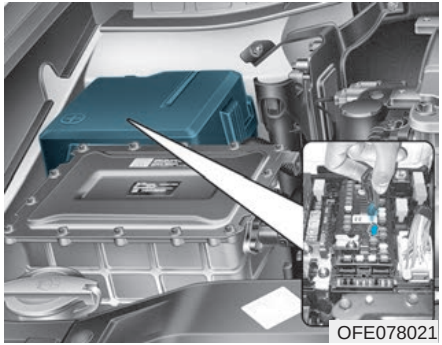
5. Pull the suspected fuse straight out. Use the removal tool provided in the fuel cell power module compartment fuse panel.
6. Check the removed fuse; replace it if it is blown. Spare fuses are provided in the instrument panel fuse panels (or in the fuel cell power module compartment fuse panel).
7. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, consult 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.

If the headlights or other electrical components do not work and the fuses are OK, check the fuse panel in the fuel cell power module compartment. If a fuse is blown, it must be replaced with the same rating.

## Fuel cell power module compartment Panel Fuse Replacement

### *Blade / Cartridge type*



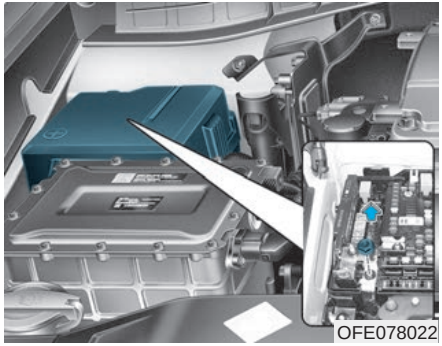

1. Turn the vehicle off.
2. Turn all other switches OFF.
3. Remove the fuse panel cover by pressing the tap and pulling up.
4. Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the removal tool in the motor compartment fuse panel.
5. Push in a new fuse of the same rating, and make sure it fits tightly in the clips. If it fits loosely, consult an authorized HYUNDAI dealer.

**⚠ CAUTION**

**After checking the fuse box in the fuel cell power module compartment securely close the fuse box cover inside the motor compartment, until it clicks.**

**If the fuse box is not closed properly, water may leak in side, possibly causing a malfunction with the electrical system.**

### *Multi fuse*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If the multi fuse is blown, it must be removed as follows:

1. Turn the vehicle off.
2. Disconnect the negative battery connector located on the trunk.
3. Remove the fuse panel cover by pressing the tab and pulling it up.
4. Remove the nuts shown in the picture above.
5. Replace the fuse with a new one of the same rating.
6. Reinstall in the reverse order of removal.

**i Information**

**If the multi fuse is blown, consult an authorized HYUNDAI dealer.**

## Fuse/Relay Panel Description

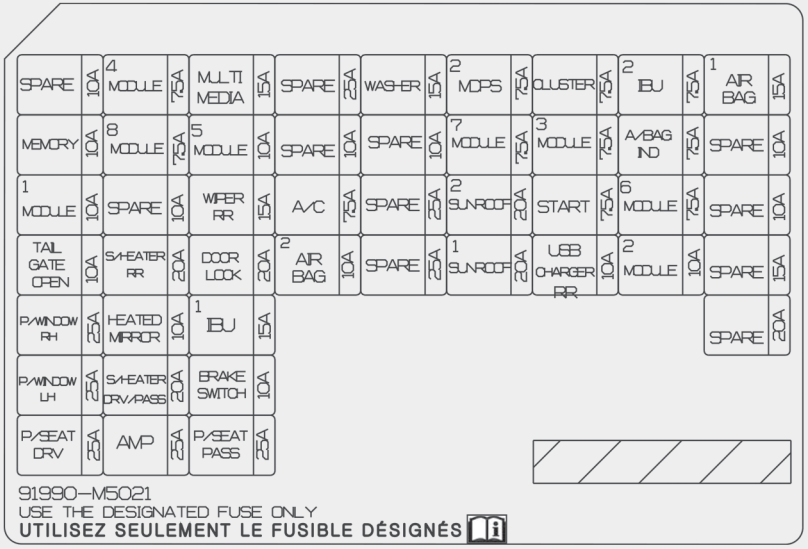
### *Instrument panel fuse panel*

OFE078024

Inside the fuse/relay box cover, you can find the fuse/relay label describing fuse/relay name and capacity.

### Information

**Not all fuse panel descriptions in this manual may be applicable to your vehicle; the information is accurate at the time of printing. When you inspect the fuse box on your vehicle, refer to the fuse box label.**

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## Instrument panel fuse panel

| Fuse Name | Fuse Rating | Protected Component |
|---|---|---|
| MEMORY | 10 A | A/C Control Module, A/C Control Panel, Instrument Cluster |
| MODULE1 | 10 A | ICM Relay Box (Outside Mirror Folding/Unfolding Relay), A/V & Navigation Head Unit (Hazard Lamp Switch), Shift Selection Switch (SBW), Auto Light & Photo Sensor, Driver/Passenger Power Outside Mirror, PE Room Junction Block (RLY.4), Power Tail Gate Module |
| TAIL GATE OPEN | 10 A | Tail Gate Relay |
| P/WINDOW RH | 25 A | Power Window RH Relay, Passenger Safety Window Module, Rear Safety Window Module RH |
| P/WINDOW LH | 25 A | Power Window LH Relay, Driver Safety Window Module, Rear Safety Window Module LH |
| P/SEAT DRV | 25 A | Driver Seat Manual Switch |
| MODULE4 | 7.5 A | IBU, Remote Control Smart Parking Assist Unit, VESS Unit, Electronic Parking Brake Switch, Lane Keeping Assist Unit(Line), Blind-Spot Collision Warning Unit LH/RH, Crash Pad Switch, Surround View Monitor Unit |
| MODULE8 | 7.5 A | Data Link Connector, Crash Pad Switch |
| S/HEATER RR | 20 A | Rear Seat Heater |
| HEATED MIRROR | 10 A | Driver/Passenger Power Outside Mirror, A/C Control Panel |
| S/HEATER FRT | 20 A | Front Air Ventilation/Seat Heater Seat Control Module |

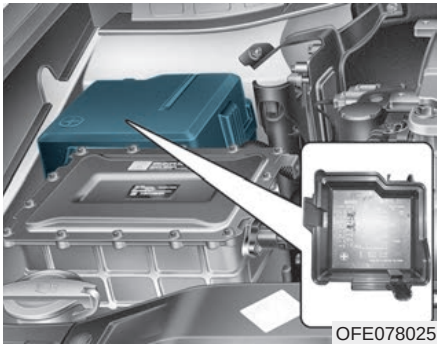
## Instrument panel fuse panel

| Fuse Name | Fuse Rating | Protected Component |
|---|---|---|
| AMP | 25 A | AMP |
| MULTI MEDIA | 15 A | A/V & Navigation Head Unit |
| MODULE5 | 10 A | Front Air Ventilation/Seat Heater Seat Control Module, AMP, A/V & Navigation Head Unit, A/C Control Panel, PTC Heater, A/C Control Module, Electro Chromic Mirror, Rear Seat Heater |
| WIPER (RR) | 15 A | ICM Relay Box (Rear Wiper Relay), Rear Wiper Motor |
| DOOR LOCK | 20 A | Door Lock Relay, Door Unlock Relay, ICM Relay Box (Two Turn Door Unlock Relay) |
| IBU1 | 15 A | IBU |
| BRAKE SWITCH | 10 A | IBU, Stop Lamp Switch |
| P/SEAT PASS | 25 A | Passenger Seat Manual Switch |
| A/C | 7.5 A | A/C Control Module, Incar Temperature Sensor, A/C Control Panel, Cluster Ionizer, A/C Compressor |
| AIR BAG2 | 10 A | SRS Control Module |
| WASHER | 15 A | Multifunction Switch |

## Instrument panel fuse panel

| Fuse Name | Fuse Rating | Protected Component |
|---|---|---|
| MDPS2 | 7.5 A | MDPS Unit |
| MODULE7 | 7.5 A | Front Air Ventilation/Seat Heater Seat Control Module, AC Inverter, Rear Seat Heater, Surround View Monitor Unit |
| SUNROOF2 | 20 A | Sunroof Unit |
| SUNROOF1 | 20 A | Sunroof Unit |
| CLUSTER | 7.5 A | Instrument Cluster |
| MODULE3 | 7.5 A | SCU, Shift Selection Switch (SBW), IDC, VPD Sensor, Stop Lamp Switch, HMU, BMS Control Module |
| START | 7.5 A | FCU, IBU |
| USB CHARGER RR | 10 A | USB Charger Rear |
| IBU2 | 7.5 A | IBU |
| A/BAG IND | 7.5 A | Instrument Cluster, A/C Control Panel |
| MODULE6 | 7.5 A | IBU |
| MODULE2 | 10 A | BMS Control Module, Wireless Charger, USB Charger LH/RH, A/V & Navigation Head Unit, Center Fascia Switch Panel, AMP, Power Outside Mirror Switch, IBU |
| AIR BAG1 | 15 A | SRS Control Module, Passenger Occupant Detection Sensor |

### *Fuel cell power module compartment fuse panel*

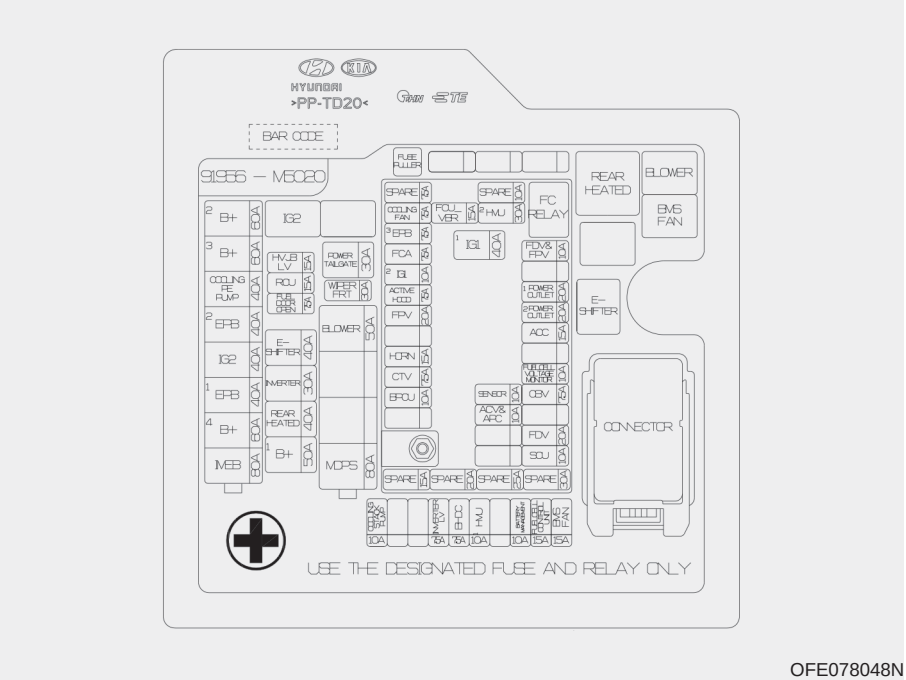


OFE078025

Inside the fuse/relay box cover, you can find the fuse/relay label describing fuse/relay name and capacity.

## Information

**Not all fuse panel descriptions in this manual may be applicable to your vehicle; the information is accurate at the time of printing. When you inspect the fuse panel in your vehicle, refer to the fuse panel label.**




OFE078048N

## Motor compartment fuse panel

| Type | Fuse Name | Fuse Rating | Circuit Protected |
|---|---|---|---|
| MULTI FUSE-1 | B+2 | 60 A | ICU Junction Block (IPS Control Module, IPS1) |
| | B+3 | 60 A | ICU Junction Block (IPS Control Module) |
| | COOLING PE PUMP | 40 A | PE Room Coolant Pump (CPP) |
| | EPB2 | 40 A | Electronic Brake Control Module |
| | IG2 | 40 A | PE Room Junction Block (IG2 Relay) |
| | EPB1 | 40 A | Electronic Brake Control Module, PE Room Junction Block (Multipurpose Check Connector) |
| | B+4 | 60 A | ICU Junction Block (Fuse - SUNROOF1, SUNROOF2, AMP, P/SEAT DRV, P/SEAT PASS, S/HEATER FRT, P/WINDOW LH, P/WINDOW RH, TAIL GATE OPEN) |
| | IMEB | 80 A | Electronic Brake Control Module |
| MULTI FUSE-2 | BLOWER | 50 A | PE Room Junction Block (Blower Relay) |
| | MDPS | 80 A | MDPS Unit |

## Motor compartment fuse panel

| Type | Fuse Name | Fuse Rating | Circuit Protected |
|---|---|---|---|
| FUSE | HVJB LV | 15 A | HV Junction Block |
| | RCU | 15 A | Driver / Passenger Auto Flush Door Handle Module,<br>Rear Auto Flush Door Handle Module LH/RH |
| | FUEL DOOR OPEN | 7.5 A | ICM Relay Box (Fuel Filler Door Relay) |
| | E-SHIFTER | 40 A | PE Room Junction Block (E-Shifter Relay) |
| | INVERTER | 30 A | AC Inverter |
| | REAR HEATED | 40 A | PE Room Junction Block (Rear Heated Relay) |
| | B+1 | 50 A | ICU Junction Block ((Fuse - MODULE1, AIR BAG2, MODULE8,<br>S/HEATER RR, DOOR LOCK, IBU1, BRAKE SWITCH), Leak Current Autocut Relay) |
| | POWER TAIL GATE | 30 A | Power Tail Gate Module |
| | WIPER FRT | 30 A | Front Wiper Motor |
| | COOLING STACK PUMP | 10 A | Stack Coolant Pump (CSP) |
| | INVERTER LV | 7.5 A | Inverter |

## Motor compartment fuse panel

| Type | Fuse Name | Fuse Rating | Circuit Protected |
|---|---|---|---|
| FUSE | BHDC | 7.5 A | IDC |
| | HMU1 | 10 A | HMU |
| | BATTERY MANAGEMENT | 10 A | BMS Control Module |
| | FUEL CELL CONTROL UNIT | 15 A | FCU |
| | BMS FAN | 15 A | PE Room Junction Block (BMS FAN Relay) |

## LIGHT BULBS

Consult 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 can result in damage to the vehicle.

### Information

**The headlight and tail lamp lenses could appear frosty if the vehicle is washed after driving or the vehicle is driven at night in wet weather. This condition is caused by temperature difference between the lamp inside and outside and, it does not indicate a problem with your vehicle. When moisture condenses in the lamp, it will be removed after driving with the headlight on. The removable level may differ depending on lamp size, lamp position and environmental condition. However, if moisture is not removed, have the vehicle is inspected by an authorized HYUNDAI dealer.**

### WARNING

- **Prior to replacing a lamp, shift to P (Park), apply the parking brake, place the POWER button in 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.**

### Information

- **A normally functioning lamp may flicker momentarily to stabilize the vehicle's electrical control system. However, if the lamp goes out after flickering momentarily, or continues to flicker, have the vehicle be checked by an authorized HYUNDAI dealer.**
- **The parking lamp may not turn on when the parking lamp switch is turned on, but the parking lamp 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, have the vehicle be checked by an authorized HYUNDAI dealer.**

## Headlight, front center lamp, turn signal lamp, daytime running lamp, parking lamp, side marker replacement

OFE078028N

(1) Headlight (Low/High)
(2) Front center lamp
(3) Turn signal/daytime running lamp/parking lamp
(4) Side marker

Your vehicle is equipped with LED lamps. LED lamps do not have replaceable bulbs. If the LED lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

### Information

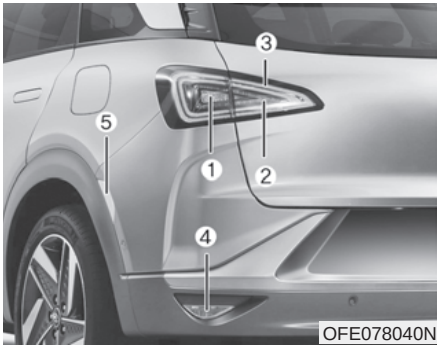
**The headlight aiming should be adjusted after an accident or after the headlight assembly is reinstalled at an authorized HYUNDAI dealer.**

## Side Repeater Lamp Replacement

OFE078029

Your vehicle is equipped with LED lamps. LED lamps do not have replaceable bulbs. If the LED lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

## Rear Combination Light Bulb Replacement



OFE078040N

(1) Turn signal lamp/stop lamp
(2) Turn signal lamp/stop lamp
(3) Tail lamp
(4) Backup lamp
(5) Side marker

### *Stop lamp, tail lamp, turn signal lamp, backup lamp and side marker*

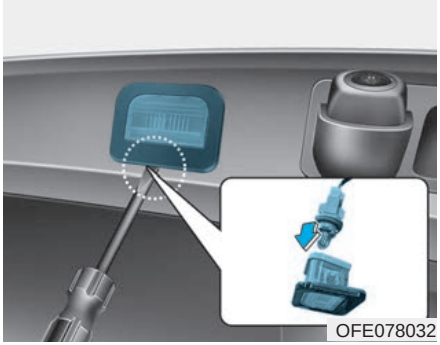
Your vehicle is equipped with LED lamps. LED lamps do not have replaceable bulbs. If the LED lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

## High mounted stop lamp

OFE078031

If the high mounted stop lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

## License Plate Light Bulb Replacement


OFE078032

1. Using a flat-blade screwdriver, gently pry the lens cover from the lamp housing.
2. Remove the bulb by pulling it straight out.
3. Install a new bulb.
4. Reinstall in the reverse order.

## Interior Light Bulb Replacement

### *Map lamp, room lamp and luggage compartment lamp*

■ Map lamp

OFE078033

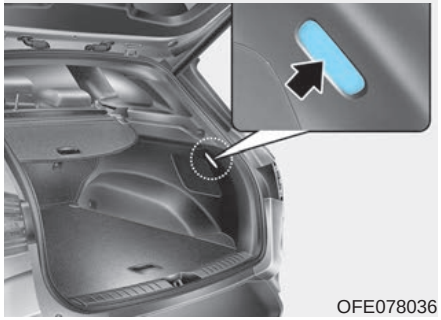
■ Room lamp (Type B)

OFE078034

■ Room lamp (Type A)

OAEE076027

■ Luggage compartment lamp


OFE078036

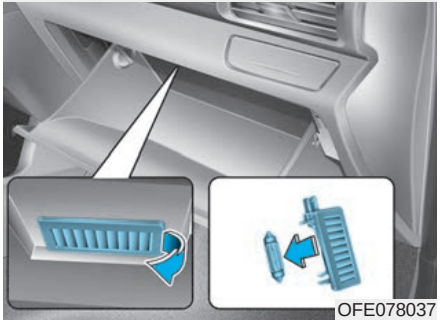
Your vehicle is equipped with LED lamps. LED lamps do not have replaceable bulbs. If the LED lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

### *Vanity mirror lamp and glove box lamp*

■ Vanity mirror lamp

OFE078035

■ Glove box lamp



OFE078037

1. Using a flat-blade screwdriver, gently pry the lens from the interior lamp housing.
2. Remove the bulb by pulling it straight out.

**⚠ WARNING**

**Prior to working on the Interior Lights, ensure that the lamp is off to avoid burning your fingers or receiving an electric shock.**

3. Install a new bulb in the socket.
4. Align the lens tabs with the interior lamp housing notches and snap the lens into place.

***NOTICE***

**Use care not to dirty or damage lens, lens tab, and plastic housings.**

# 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.

### *High-pressure washing*

- When using high-pressure washers, make sure to maintain sufficient distance from the vehicle. Insufficient clearance or excessive pressure can lead to component damage or water penetration.
- Do not spray the camera, sensors or its surrounding area directly with a high pressure washer. Shock applied from high pressure water may cause the device to not operate normally.
- Do not bring the nozzle tip close to boots (rubber or plastic covers)or connectors as they may be damaged if they come into contact with high pressure water.
- Do not use any high-pressure nozzles, which induce either one-direct water stream or water swirling.

### *Protecting your vehicle's finish*

#### Washing

To help protect your vehicle's finish from rust and deterioration, wash it thoroughly and frequently at least once a month with lukewarm or cold water.

If you use your vehicle for off-road driving, you should 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 can damage your vehicle's finish if not removed immediately.

Even prompt washing with plain water may not completely remove all these deposits. A mild soap, safe for use on painted surfaces, should be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

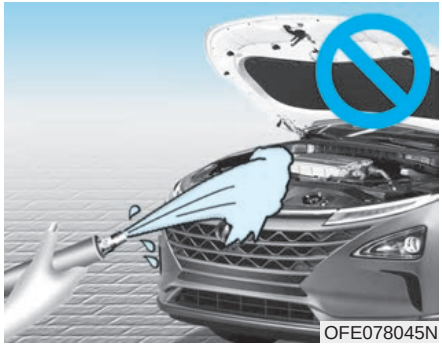
**⚠ WARNING**

**After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water before getting on the road. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.**

**NOTICE**

- 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.
- Be careful when washing the side windows of your vehicle.

  Especially, with high-pressure water, water may leak through the windows and wet the interior.
- To prevent damage to the plastic parts, do not clean with chemical solvents or strong detergents.


OFE078045N

**NOTICE**

- Water washing in the fuel cell power module compartment including high pressure water washing may cause the failure of electrical circuits located in the fuel cell power module compartment.
- Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.

**NOTICE**

**Matte paint finish vehicle**

Automatic car wash which uses rotating brushes should not be used as this can damage the surface of your vehicle. A steam cleaner which washes the vehicle surface at high temperature may result the oil to adhere and leave stains that is 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, you should 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 car.

### Waxing

A good coat of wax provides a barrier between your paint and environmental contamination.

Keeping a good coat of wax on your vehicle will help protect it.

Wax the vehicle when water will no longer bead 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 will usually strip 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**

- **Wiping dust or dirt off the body with a dry cloth will scratch 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. This may result in damage to the protective coating and cause discoloration or paint deterioration.**

**NOTICE**

**Matte paint finish vehicle**

**Do not use any polish protector such as a detergent, an abrasive and a polish. In case wax is applied, remove the wax immediately using a silicon remover and if any tar or tar contaminant is on the surface use a tar remover to clean. However, be careful not to apply too much pressure on the painted area.**

### *Repairing your vehicle's finish*

Deep scratches or stone chips in the painted surface must be repaired promptly. Exposed metal will quickly rust and may develop into a major repair expense.

**NOTICE**

**If your vehicle is damaged and requires any metal repair or replacement, be sure the body shop applies anti-corrosion materials to the parts repaired or replaced.**

**NOTICE**

**Matte paint finish vehicle**

**In case of matte paint finish vehicles, it is impossible to modify only the damaged area and repair of the whole part is necessary. If the vehicle is damaged and painting is required, have your vehicle maintained and repaired by an authorized HYUNDAI dealer. Take extreme care, as it is difficult to restore the quality after the repair.**

### *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 can occur on underbody parts such as the fuel lines, frame, floor pan and exhaust system, 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 will do 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 should not be allowed to clog with dirt; trapped water in these areas can cause rusting.

**⚠ WARNING**

**After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.**

### *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.**
- **Clean the wheel when it has cooled.**
- **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 cars 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 is also required.

### Common causes of corrosion

The most common causes of corrosion on your vehicle are:

- Road salt, dirt and moisture that is allowed to accumulate underneath the vehicle.
- Removal of paint or protective coatings by stones, gravel, abrasion or minor scrapes and dents which 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 car 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 the moisture and promote corrosion.

High temperatures can 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 accumulations of other materials. This applies not only to the visible surfaces but particularly to the underside of the vehicle.

### To help prevent corrosion

*Keep your car 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, etc.), you should 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 will 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, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

*Keep your garage dry*

Don't park your car 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 can 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 should 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. See the instructions for the proper way to clean vehicle interior surfaces.

**NOTICE**

- **Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as 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 (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 (if 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 fresh spots do not receive immediate attention, the fabric can be stained and its color can be affected. Also, its fire-resistant properties can 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 (if equipped)

- Feature of Seat Leather
  - Leather is made from the outer skin of an animal, which goes through a special process to be available for use. Since it is a natural object, each part differs in thickness or density.

    Wrinkles may appear as a natural result of stretching and shrinking depending on the temperature and humidity.
  - 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.
  - Wrinkles may appear naturally from usage. It is not a fault of the products.

**⚠ CAUTION**

- **Wrinkles or abrasions which 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.**
- **Make sure not to wet the seat. It may change the nature of natural leather.**
- **Jeans or clothes which could bleach may contaminate the surface of the seat covering fabric.**

- Caring for the leather seats
  - Vacuum the seat periodically to remove dust and sand on the seat. It will prevent abrasion or damage of the leather and maintain its quality.
  - Wipe the natural leather seat cover often with dry or soft cloth.
  - Use of proper leather protective 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 is easily contaminated and the stain is noticeable. Clean the seats frequently.
  - Avoid wiping with wet cloth. It may cause the surface to crack.

- Cleaning the leather seats
  - Remove all contaminations instantly. Refer to instructions below for removal of each contaminant.
  - Cosmetic products (sunscreen, foundation, etc.)

    Apply cleansing cream on a cloth and wipe the contaminate spot. Wipe off the cream with a wet cloth and remove water with a dry cloth.
  - Beverages (coffee, soft drink, etc.)

    Apply a small amount of neutral detergent and wipe until contaminations do not smear.
  - Oil

    Remove oil instantly with absorbable cloth and wipe with stain remover used only for natural leather.
  - Chewing gum

    Harden the gum with ice and remove gradually.

### *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. 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 of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with glass cleaner. Follow the directions on the glass cleaner container.

**NOTICE**

**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

Perchlorate Material-special handling may apply, See: https://dtsc.ca.gov/perchlorate

Notice to California Vehicle Dismantlers:

Perchlorate containing materials, such as air bag inflators, seatbelt pretensioners and keyless remote entry batteries, must be disposed of according to Title 22 California Code of Regulations Section 67384.10 (a).

# Specifications, Consumer information and Reporting safety defects

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# DIMENSIONS

| Items | | in (mm) |
|---|---|---|
| Overall length | | 183.86 (4,670) |
| Overall width | | 73.23 (1,860) |
| Overall height | | Without roof side rails : 64.17 (1,630)<br>With roof side rails : 64.57 (1,640) |
| Front tread | 225/60 R17 | 63.70 (1,618) |
| | 245/45 R19 | 63.54 (1,614) |
| Rear tread | 225/60 R17 | 64.13 (1,629) |
| | 245/45 R19 | 63.98 (1,625) |
| Wheelbase | | 109.84 (2,790) |

## BULB WATTAGE

| Light Bulb | | | Bulb Type | Wattage |
|---|---|---|---|---|
| Front | Headlight | Low/High | LED | LED |
| | Turn signal lamp | | LED | LED |
| | Front center lamp | | LED | LED |
| | Parking lamp | | LED | LED |
| | Daytime running lamp (DRL) | | LED | LED |
| | Side Repeater lamp (Outside mirror) | | LED | LED |
| | Side marker | | LED | LED |
| Rear | Rear combination lamp | Stop | LED | LED |
| | | Tail | LED | LED |
| | | Turn signal | LED | LED |
| | | Back up | LED | LED |
| | | Side marker | LED | LED |
| | High mounted stop lamp | | LED | LED |
| | License plate lamp | | W5W | 5 |
| Interior | Map lamp | | LED | LED |
| | Room lamp | | LED | LED |
| | Vanity mirror lamp | | FESTOON | 5 |
| | Luggage compartment lamp | | LED | LED |
| | Glove box lamp | | FESTOON | 5 |

## TIRES AND WHEELS

| Items | Tire Size | Wheel Size | Inflation Pressure kPa (psi) | | | | Wheel Lug Nut Torque kgf•m (lbf•ft, N•m) |
|---|---|---|---|---|---|---|---|
| | | | Normal Load *1 | | Maximum Load *2 | | |
| | | | Front | Rear | Front | Rear | |
| Full size tire | 225/60 R17 | 7.0J X 17 | 250 (36) | 250 (36) | 250 (36) | 250 (36) | 11~13 (79~94, 07~127) |
| | 245/45 R19 | 7.5J X 19 | | | | | |

*1: Normal load : Up to 3 persons

*2: Maximum load : Up to 5 persons

If your vehicle is not equipped with a compact spare tire, your vehicle will be equipped with a Tire Mobility Kit.

**NOTICE**

- **It is permissible to add 3 psi to the standard tire pressure specification if colder temperatures are expected soon.**

  **Tires typically loose 1psi (7kPa) for every 12°F temperature drop. If extreme temperature variations are expected, recheck your tire pressure as necessary to keep them properly inflated.**
- **An air pressure generally decreases, as you drive up to a high-altitude area above sea level. Thus, if you plan to drive a high-altitude area, check the tire pressures in advance. If necessary, inflate them to a proper level. (Air inflation per altitude : +2.4 psi/1 mile)**

**⚠ CAUTION**

**When replacing tires, use the same size originally supplied with the vehicle.**

**Using tires of a different size can damage the drivetrain, cause driveability issues, and possibly cause damage.**

## VOLUME AND WEIGHT

| Gross Vehicle Weight lbs. (kg) | Luggage Volume cu ft (l) | |
|---|---|---|
| | Min. | Max. |
| 5,159 (2,340) | 16.28(461) | 51.77 (1,466) |

## AIR CONDITIONING SYSTEM

| Items | Weight of Volume | Classification |
|---|---|---|
| Refrigerant oz. (g) | 20.28±0.88 (575±25) | R-1234yf |
| Compressor lubricant oz. (cc) | 4.59±0.35 (130±10) | POE |

Contact an authorized HYUNDAI dealer for more details.

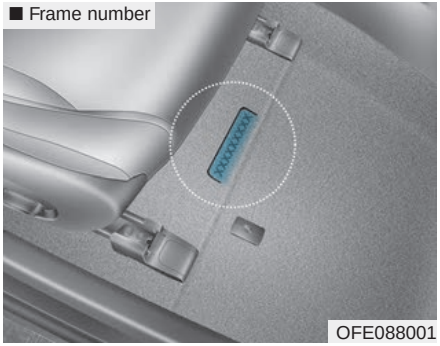
## RECOMMENDED LUBRICANTS AND CAPACITIES

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.

| Lubricant | | Volume | Classification |
|---|---|---|---|
| Reduction gear fluid | | 1.06 US qt (1 *l*) | GL4 75W/85, TGO-9 |
| Coolant | Fuel cell stack | We recommend that you consult an authorized Hyundai dealer. | |
| | Traction motor | | |
| Brake fluid | | Amount required | SAE J1704 DOT-4LV,<br>FMVSS116 DOT-4,<br>ISO4925 CLASS-6 |
| Fuel | | 165.48 US qt. (156.6 *l*) | Hydrogen (SAE J2719 or ISO 14687-2) |

## VEHICLE IDENTIFICATION NUMBER (VIN)

■ Frame number

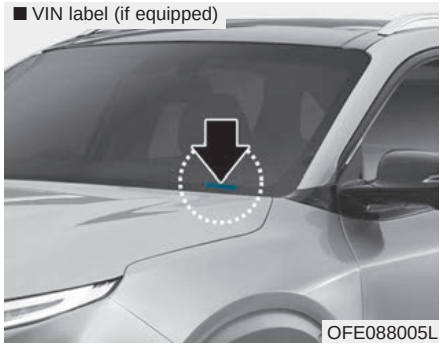


OFE088001

The vehicle identification number (VIN) is the number used in registering your car and in all legal matters pertaining to its ownership, etc.

The number is punched on the floor under the passenger seat. To check the number, open the cover.

■ VIN label (if equipped)



OFE088005L

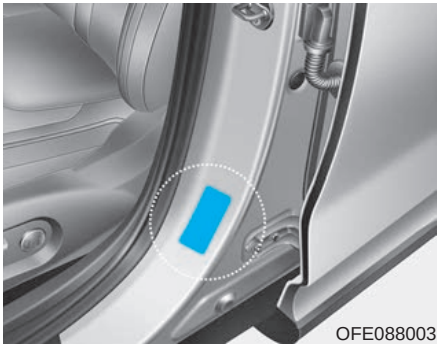
The VIN is also on a plate attached to the top of the dashboard. The number on the plate can easily be seen through the windshield from outside.

## VEHICLE CERTIFICATION LABEL

OFE088002

The vehicle certification label attached on the driver's side center pillar gives the Vehicle Identification Number (VIN).

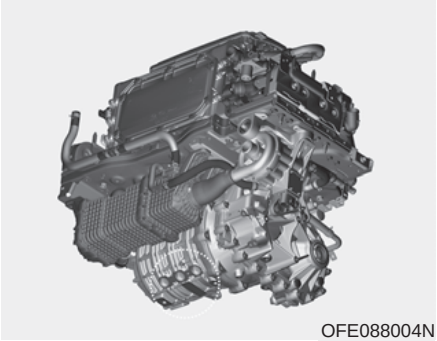
## TIRE SPECIFICATION AND PRESSURE LABEL


OFE088003

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 car.

## TRACTION MOTOR NUMBER


OFE088004N

The motor number can be seen from under the vehicle.

## 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.

## 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.