

## **KONA Electric**

This Owner's Manual should be considered a part of the car and remain with it when it is sold for the use of the next owner.

	OWNER'S	INFORMATION
ORIGINAL OWNER	R	
ADDRESS		
CITY	STATE	ZIP CODE
DELIVERY DATE_		
	(Do	te Sold to Original Retail Purchaser
DEALER NAME _		DEALER NO
ADDRESS		
CITY	STATE	ZIP CODE

## **OWNER'S MANUAL**

Operation Maintenance Specifications

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

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

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

#### **CAUTION: MODIFICATIONS TO YOUR HYUNDA!**

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

#### 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 our 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.

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# 1. Foreword / Starting Your Electric Vehicle

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#### **FOREWORD**

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 2-11 in the Vehicle Specifications section of the Owner's Manual.

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#### **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. We strongly recommend that you read the entire manual. In order to minimize the chance of death or injury, you must read the WARNING and CAUTION sections in the manual.

Illustrations complement the words in this manual to best explain how to enjoy your vehicle. By reading your manual, you will learn about features, important safety information, and driving tips under various road conditions.

The general layout of the manual is provided in the Table of Contents. Use the index when looking for a specific area or subject; it has an alphabetical listing of all information in your manual.

Sections: This manual has nine chapters plus an index. Each section begins with a brief list of contents so you can tell at a glance if that section has the information you want.

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



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



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.

#### **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.



#### **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 (for example, 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.

#### **ELECTRIC VEHICLE**

#### **Electric Vehicle (EVs)**

An electric vehicle is driven using a battery and an electric motor. While general vehicles use an internal combustion engine and gasoline as fuel, electric vehicles use electrical energy that is charged inside the high voltage battery. As a result, electric vehicles are eco-friendly in that they do not require fuel and do not emit exhaust gases.

## Characteristics of Electric Vehicles (EVs)

- EVs are using the electrical energy that is charged inside the high voltage battery. In terms of air pollution and greenhouse gas emissions, EVs are cleaner than conventional vehicles.
- A 150 kW electric drive motor mated to a reduction gearbox comprises the vehicle drivetrain. This electriconly powertrain significantly reduces engine room noise and vibration while driving.
- When decelerating or driving downhill, regenerative braking is utilized to charge the high voltage battery. This helps to minimize energy loss and increases vehicle range.
- 4. When the state of charge (SOC) of the battery is low, the EV battery can be recharged through several different charging methods. Refer to "Charging Information" later in this section.

## *i* Information

What does regenerative braking do? It uses an electric motor when decelerating and braking and transforms kinetic energy to electrical energy in order to charge the high voltage battery. (Torque is applied in the opposite direction when decelerating to generate braking force and electric energy.)

#### **Battery Information**

- The vehicle is composed of a high voltage battery that drives the motor and air-conditioner, and an auxiliary battery (12 V) that drives the lamps, wipers, and audio system.
- The auxiliary battery is automatically charged when the vehicle is in the ready ( ) mode or the high voltage battery is being charged.

#### MAIN COMPONENTS OF ELECTRIC VEHICLE

## Main Components of Electric Vehicle

- On-Board Charger (OBC): A device that charges the high voltage battery by converting AC power from a charging station to DC power. Inverter: A device that transforms direct current (DC) from the high voltage battery into alternating current (AC) to supply power to the electric motor and transforms AC back into DC when available to charge the high voltage battery.
- LDC: An LDC is a Low Voltage DC-to-DC converter that transforms power from the high voltage battery to the low voltage battery (12V) in order to supply electrical power to the vehicle to operate the lights, wipers, multimedia, etc.
- Electric Motor: A device that converts electrical energy from the high voltage battery into mechanical energy which is then transferred as rotational torque to the wheels in order to drive the vehicle.
- Reduction gear: Delivers rotational force of the motor to the tires at appropriate speeds and torque.
- EV Battery (Lithium-ion): On board high voltage storage device with a capacity up to 64 kWh
- \* OBC: On-Board Charger
- \* LDC: Low Voltage DC-DC Converter

## **MARNING**

- Do not intentionally remove or disassemble high voltage components and high voltage battery connectors and wires. Also, be careful not to damage high voltage components and the high voltage battery. It may cause serious injury and significantly impact the performance and durability of the vehicle.
- When inspection and maintenance is required for high voltage components and the high voltage battery, contact an authorized HYUNDAI dealer.

## High Voltage Battery (lithium-ion polymer)

- The charge amount of the high voltage battery may gradually decrease when the vehicle is not being driven.
- The battery capacity of the high voltage battery may decrease when the vehicle is stored in high/low temperatures.
- Electric range may vary depending on the driving conditions, even if the charge amount is the same. The high voltage battery may expend more energy when driving at high speed or uphill. These actions may reduce the vehicle electric range.
- The high voltage battery is used when using the air-conditioner / heater. This may reduce the vehicle range. Make sure to set moderate temperatures when using the air-conditioner/heater.
- Natural degradation may occur with the high voltage battery depending on the number of years the vehicle is used. This may reduce the vehicle range.
- If over time the maximum charge capacity and the maximum electric range appears to have degraded more than 30% less than at new condition, contact an authorized HYUNDAI dealer for inspection and maintenance.
- If the vehicle will not be used for an extended amount of time, it is recommended to fully charge the vehicle to 100% before storing, and then charge the vehicle periodically (approximately every 3 months) to prevent the EV battery from discharging completely.
- AC charge is recommended to keep the high voltage battery in optimal condition.

Avoid storing the vehicle with a low battery SOC % (for example, below 20%). Storing the vehicle with the EV battery capacity at a low SOC may damage the battery over time.



#### ! CAUTION

- Make sure to use a designated charger when charging the high voltage battery. Using different types of chargers may have a serious impact on vehicle durability.
- If the vehicle is kept at "H (High)" for a long period, it may damage the high voltage battery and the high voltage battery may have to be replaced depending on the level of degradation.
- If the vehicle is in a collision, contact an authorized HYUNDAI dealer to inspect whether the high voltage battery is still connected.

## EV Battery Coolant Heater (if equipped)

When charging your vehicle, the EV battery coolant heater may be turned on to increase battery temperature when the battery temperature is low (for example, in cold weather conditions). This allows the EV battery to charge at nominal temperatures and helps to improve battery life.

Note that when the vehicle is being charged some of the electrical current coming from the charger is being used to operate the EV battery coolant heater. Electrical power consumption for charging may be slightly higher than normal.



#### CAUTION

The high voltage battery warmer system operates when the charging connector is connected to the vehicle.

However, the high voltage warmer system may not operate when battery temperature drops below -31°F (-35°C).

#### **EV MODE**



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If you select the "EV" menu at the home screen you can enter EV mode.

For details on EV Mode, refer to the Multimedia manual that is provided separately.



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The EV mode has a total of 5 menus, Nearby station, Energy information, Charge management, ECO driving and EV settings.

\* EV mode menu may vary depending on which functions are applicable to your vehicle.

#### **Nearby Stations**



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Select 'EV → Map → Charging stations' on the screen. Stations around the current location are searched. Select a station to see detail information of the station.

#### **Energy Information**



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Select 'EV  $\rightarrow$  Energy information' on the screen.

You can check battery information and energy consumption.

#### **Battery information**



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You can check the reachable range, total battery power remaining, and expected charging time for each charge type.

- The distance to empty is calculated based on the real-time electric energy efficiency while driving. The distance may change if the driving pattern changes.
- The distance to empty may vary according to the change of the driving pattern even if the same target battery charge level is set.

#### **Energy consumption**



OOSEV040528

You can check the current energy consumption for each system of the vehicle.

- 'Driving' shows the total power and energy consumption of the driving motor's driving energy and regenerative energy.
- (2) 'Climate' shows the power and energy consumption which are used by the heater or air conditioner.
- (3) 'Electronics' shows the power and energy consumption which are used by the vehicle systems including the cluster, infotainment system (speaker and navigation), headlight, vehicle control unit, etc.
- (4) 'Battery care' shows the momentary power and energy consumption which are used when:
  - Operating the winter mode to increase the battery temperature during winter to improve the driving performance.
  - Cooling down the battery temperature during summer to prevent over temperature of the battery.

#### **Charge Management**



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Select 'EV → Charge management' on the screen. You can set the date and time of when to charge the battery, climate control temperature, location-based charging options and other various functions.

#### Charging and climate



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You can set the date and time of when to charge the battery and the climate control temperature. Also, you may select the time to start charging using the off-peak time setting.



#### Departure time

- Set anticipated departure time for scheduled charging and target temperature.
- Select the day of the week to activate scheduled charging and target temperature for departure time.



#### **Target temperature settings**

1. Set target temperature.

#### **Pre-schedule heating**

If the target temperature (1) is set with the cable connected, the cabin temperature will be adjusted to the target temperature at departure time (without loss of high-voltage battery charging level). In cold weather, preschedule heating helps enhance electric vehicle performance by heating the vehicle in advance.



#### Off-peak time settings

- 1. If selected, starts charging only on the designated off-peak time If deselected, starts charging only on the scheduled time
- 2. Set the most inexpensive time to complete charging
- 3. Off-peak tariffs prioritized: If selected, starts charging at off-peak time (may keep on charging pass off-peak time to charge 100%)
  - Off-peak tariffs only: If selected, charges only within off-peak time (may not charge 100%)

#### Charging limit



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- The maximum charging limit can be selected for either DC fast charging (DC charger) or Level 1 / Level 2 charging (AC charger). Charging will stop when the vehicle reaches the designated battery charge level.
- The maximum charging limit can be adjusted in 10% increments.
- Note that if the battery charge level (SOC%) is above the designated maximum charging limit, the vehicle will not be charged.

#### Charging current



OOSEV040493L

- For Level 1 or Level 2 charging, you can also adjust the charging current.
   Select the appropriate charging current based on the type of charger and current capacity.
- If the charging process does not start or abruptly stops in the middle, reselect another proper current and re-try charging the vehicle.
- Charging time varies depending on which charging current is selected.

#### **ECO Driving**



Select 'EV → ECO Driving' on the screen. You can check the CO2 reduction and ECO driving history.

#### CO2 reduction



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The CO2 reduction display allows you to monitor the benefits of reduced greenhouse gas emissions of your EV relative to a conventional gasoline vehicle. While driving your vehicle, the display estimates the amount of reduced CO2 that would have been emitted from tailpipe emissions of a conventional vehicle.

#### **Driving history**



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The driving history displays information from the last several driving cycles including date, distance traveled and energy efficiency rate. A star icon indicates the driving cycle with the most efficient energy consumption rate.

#### **EV Settings**



Select 'EV  $\rightarrow$  ECO settings' on the screen. You can set the Winter mode, Warning and EV route functions.

#### **Utility Mode**

The high voltage battery is used instead of the 12V auxiliary battery for operating the convenient features of the vehicle. When driving is not necessary such as while camping or when stopping the vehicle for a long time, it is possible to use the electrical devices (audio, lights, air conditioner, heater, etc.) for long hours.



**System Setting and Activation** 

#### **System setting**

The driver can activate the Utility mode function when the following conditions are satisfied.

- The vehicle is in the ready ( ) mode and the gear is shifted to P (Park).
- The EPB (Electronic Parking Brake) is applied.
- 'EV settings → Utility mode' is selected on the infotainment system screen.

#### **System Activation**

When the system is activated:

- The ( ) indicator will turn off and the (UTIL) indicator will illuminate on the cluster.
- All electric devices are usable but the vehicle cannot be driven.
- The EPB can be cancelled by pressing the EPB switch.

Gear cannot be shifted out of P (Park). If a shift attempt is made, a message "Shifting conditions not met" will be displayed on the infotainment system screen.

#### **System Deactivation**

The Utility mode can be deactivated by pressing the START/STOP button to the OFF position. The function cannot be deactivated from the EV settings.

#### Winter mode



In cold climates and during winter months, electric vehicle range may reduce and charging times may increase.

This is primarily due to reduced performance of the EV battery when exposed to cold temperatures.

Some vehicles may come equipped with Winter mode selectable option. The Winter mode feature can be selected in the EV Settings menu.

When selected, Winter mode enables the use of the EV battery coolant heater. This mode is recommended to improve EV battery performance in cold climate conditions.

Note that EV range may reduce when Winter mode is enabled, as electrical energy is used to maintain the EV battery temperature.

Winter mode enables operation of the EV battery coolant heater. While driving your vehicle, if the battery temperature is low or the A/C and/or heater is turned ON, the EV battery coolant heater will be used.

Note that the EV battery coolant heater will not be used when the EV battery SOC is low.

\* This mode is available for the vehicles equipped with the battery heater.

#### Warning



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You can select or deselect the Range Warning.

 Range Warning: If the destination set in the navigation cannot be reached with the remaining EV battery charge level, a warning message is displayed.

#### EV route



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If EV route is selected, EV related information will show on the route. You can check the distance the vehicle can be driven with the current battery amount along the route. An icon is also indicated so the driver is able to search for nearby charging stations.

## CHARGE TYPES FOR ELECTRIC VEHICLE

#### **Charging Information**

#### · Level 2 AC Charging:

You can charge your vehicle using a 240-volt AC electrical EV charger in your home or at a public Level 2 charging station.

#### · DC Fast Charging:

You can charge your vehicle using a DC fast charger with a compatible charge cable at a public EV charging station. Make sure that the station has a compatible connector for your vehicle.

Note that prolonged and continuous use of DC fast charging may reduce the long term life of the EV battery. Usage of a DC fast charger should be minimized when possible in order to help prolong the life of the EV battery.

#### · Level 1 AC Charging:

The Electric vehicle can be charged by using household electricity. The electrical outlet in your home must comply with regulations and can safely accommodate the Voltage / Current (Amps) / Power (Watts) ratings specified on the portable charge.

#### **Charging Time Information**

Charging	g type	Economical battery type	Extended battery type
AC obargo	7.2 kW	Takes approx. 6 hours at room temperature when charged to 100%	Takes approx. 9 hours 15 minutes at room temperature when charged to 100%.
AC charge	10.5 kW	Takes approx. 4 hours 20 minutes at room temperature when charged to 100%	Takes approx. 6 hours 50 minutes at room temperature when charged to 100%.
DC abarga	100 kW charger	Takes about 47 minutes at room temperature when charged to 80%. Can be charged to 100%.	Takes about 47 minutes at room temperature when charged to 80%. Can be charged to 100%.
DC charge	50 kW charger	Takes about 48 minutes at room temperature when charged to 80%. Can be charged to 100%.	Takes about 64 minutes at room temperature when charged to 80%. Can be charged to 100%.
Portable char	rge	Takes approx. 34 hours at room temperature when charged to 100%.	Takes approx. 56 hours at room temperature when charged to 100%.

## *i* Information

Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the high voltage battery may vary.

# **Charging Types**

				p	
	How to charge	Use 240-volt AC charging station installed at a home or a public charging station	Use a DC fast charger at a public charging station	Use a standard household 110-volt outlet and the Hyundai charging cord that is equipped with your vehicle	
		Use 240 installec chargin	Use a Di chargini	Use a st outlet a that is e	
	Charging outlet				
	Charging connector				
Cec	Charging inlet (Vehicle)				
Cildiging Types	Category	AC Charge	DC Charge	Portable Charge	-

- Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the high voltage battery may vary.
- Actual charger image and charging method may vary in accordance with the charger manufacturer.

#### **CHARGE INDICATOR LAMP FOR ELECTRIC VEHICLE**

#### **Charging Status**



When charging the high voltage battery, the charge level can be checked from outside the vehicle.

#### (1) Charging status

Lamp status	<b>Details</b>	
	Charging door open (charging standby)	
white ON		
	Charging	
green ON		
$\odot$	Scheduled charging set	
green blink		
* red blink	Charging error (charging system malfunction)	
rea billik		
	Charging 12 V auxiliary battery or scheduled air conditioner/heater is operating	
yellow ON		

#### (2) Charging status

Lamp status			
Before charging (illuminate)	While charging (blink)	Details	
		High voltage battery level very low	
yellow	yellow		
		High voltage battery level low	
green	green		
		High voltage battery level middle	
green	green		
		High voltage battery level high	
green	green		

#### (3) High voltage indicator

Lamp status	Details
(B)	An LED in the front of the vehicle near the inner portion of the H-emblem indicates when the EV battery is being used while the vehicle is stationary.  The EV battery may be in use to charge the 12V auxiliary battery or when charge management is set to control the climate setting and the heater or air conditioner is turned on.

#### (4) Immediate charging

Lamp status	Details
OFF	To override any charge scheduling that has previously been set, you can press the scheduled charging deactivation button. Scheduled charging will be deactivated allowing you to charge immediately.

#### CHARGING CONNECTOR LOCK

## **Charging Connector AUTO/ LOCK Mode**



[A]: Auto mode, [B]: Lock mode

You can change the setting that locks the charging connector to the charging port on the vehicle. Change the mode using the Charging AUTO / LOCK button located on the left of the driver side dash panel. Press the ♣ button to change between AUTO mode and LOCK mode.



The charging inlet is locked during the DC charge regardless of AUTO/ LOCK mode. After charging is complete the locked charging inlet is unlocked.

## When the Charging Connector Is Locked

	LOCK	AUTO
Before charging	Yes	NO
While charging	Yes	Yes
Finished charging	Yes	NO

- LOCK mode (button indicator off):
   The connector locks when the charging connector is plugged into the charging port. The connector is locked until all doors are unlocked by the driver. This mode can be used to prevent charging cable theft.
  - If the charge connector is not disconnected within 15 seconds after unlocking all doors, the connector will be automatically locked again.
  - The charge connector will automatically relock when all the doors of the vehicle are locked.
- AUTO mode (button indicator on):
   The connector locks when charging starts. The connector unlocks when charging is complete. This mode can be used when charging in a public charging station.

#### **SCHEDULED CHARGING**

#### **Scheduled Charging**

- You can set-up a charging schedule for your vehicle using the Audio or Navigation screen or Blue Link application.
  - Refer to the Multimedia manual or the Blue Link manual for detailed information about setting scheduled charging.
- Scheduled charging can only be done when using a Level 2 AC charging station or the Level 1 AC charger with the Hyundai-supplied charging power cord.



- When scheduled charging has been set and the charging cable is connected, the indicator lamp blinks green (1) for 3 minutes, indicating that scheduled charging is enabled.
- If immediate charging is required, use the audio/infotainment screen menus to deactivate the scheduled charge setting, or press the scheduled charging deactivation button (2) for 3 seconds.

#### PRECAUTIONS FOR CHARGING ELECTRIC VEHICLE

#### **Charging Precautions**





Actual charger image and charging method may vary in accordance with the charger manufacturer.

## **MARNING**

 Electromagnetic waves that are generated from the charger can seriously impact medical electric devices such as an implantable cardiac pacemaker.

When using medical electric devices such as an implantable cardiac pacemaker, make sure to ask the medical team and manufacturer whether charging your electric vehicle will impact the operation of the medical electric devices such as an implantable cardiac pacemaker.

 Inspect the charging cable connector for any signs of water or excess dust or dirt. Connecting the cable when there is water or dirt on the connector may initiate a short circuit and cause a fire or electric shock.

## ⚠ V

#### WARNING

- Use caution not to touch the charging connector or the charging port when connecting the cable from the charger to the charging port on the vehicle.
- Comply with the following in order to prevent electrical shock when charging:
  - Use caution when connecting the charger to the charging port when it is raining or snowing.
  - Use caution when there are adverse weather conditions such as lightning.
  - Use caution when the charging connector or the charging plug is wet.
  - Do not touch the charging connector and charging plug with your hands wet, or do not stand in water or snow while connecting the charging cable.

## ⚠ WARNING

- Immediately stop charging when you find abnormal symptoms (odor, smoke).
- Replace the charging cable if the cable coating is damaged to prevent electrical shock.
- When connecting or removing the charging cable, make sure to hold the charging connector handle and charging plug.

If you pull the cable itself (without using the handle), the internal wires may be disconnected or get damaged. This may lead to electric shock or fire.



#### CAUTION

- Kepp the charging connector and charging plug in clean and dry condition. Be sure to keep the charging cable in a condition where there is no water or moisture.
- Before charging the battery, turn the vehicle OFF.
- When the vehicle is switched OFF while charging, the cooling fan inside the motor compartment may automatically operate. Do not touch the cooling fan while charging.
- Be careful not to drop the charging connector. The charging connector can be damaged.

#### **CHARGING ELECTRIC VEHICLE (AC CHARGE)**

#### **AC Charge**



Actual charger image and charging method may vary in accordance with the charger manufacturer.

#### How to Connect AC Charger

- Depress the brake pedal and apply the electronic parking brake.
- 2. Shift to P (Park) and turn OFF the vehicle using the POWER button.

## *i* Information

If charging is initiated without the gear in P (Park), charging will start only after the gear is automatically shifted to P (Park).



Unlock the vehicle before opening the charging door. From the outside the vehicle, push on the charging door in the area indicated by the arrow to open the door.

## *i* Information

If you cannot open the charging door due to freezing weather, tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door.



- 4. Remove the charging port dust cover (1).
- 5. Inspect the charging port to make sure it is free from any dust or debris.
- 6. Hold the charging connector handle firmly and insert the connector into the charging port all the way. If the connector is not completely inserted into the charging port, arcing may occur. This may cause a fire.

### *i* Information

 $Charging\ connector\ AUTO/LOCK\ mode$ 

The charging connector is locked in the inlet at a different period according to which mode is selected.

- LOCK mode: The connector locks when the charging connector is plugged into the charging inlet.
- AUTO mode: The connector locks when charging starts.

For more details, refer to "Charging Connector AUTO/ LOCK Mode" in this chapter.



- Once the vehicle is connected, confirm that charging has initiated from the EV charging station display screen.
- 8. Check if the charging indicator light ( ) of the high voltage battery in the instrument cluster is turned ON. Charging is not active when the charging indicator light ( ) is OFF. If the charging indicator light is OFF, it may be necessary to disconnect the charging connector from the vehicle and repeat the connection process. Refer to the charging station display screen for more information.



- During AC charging, the radio reception may be bad.
- During charging, the gear cannot be shifted from P (Park) to any other gear.



 After charging has started, the estimated charging time is displayed on the instrument cluster for about 1 minute.

If you open the driver seat door while charging, the estimated charging time is also displayed on the instrument cluster for about 1 minute. When scheduled charging or scheduled air conditioner/heater is set, the estimated charging time is displayed as "--".

## *i* Information

Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the battery may vary.

#### **Checking Charging Status**



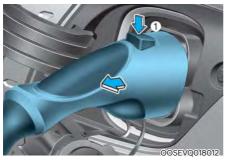
When charging the high voltage battery, the charge level can be checked from outside the vehicle.

Lamp	status	
Before charging (illuminate)	While charging (blink)	Details
		High voltage battery level very low
yellow	yellow	
		High voltage battery level low
green	green	
		High voltage battery level middle
green	green	
		High voltage battery level high
green	green	

#### How to Disconnect AC Charger



 Confirm that charging has stopped on the EV charging station display screen.



2. Hold the charging connector handle and pull it while pressing the release button (1).

## *i* Information

To prevent charging cable theft, the charging connector cannot be disconnected from the charging port when the doors are locked. Unlock all doors to disconnect the charging connector from the charging port.

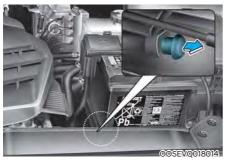
However, if the vehicle is in the charging connector AUTO mode, the charging connector automatically unlocks from the charging port when charging is completed.

For more details, refer to "Charging Connector AUTO/LOCK Mode" in this chapter.



- Make sure to re-install the charging port dust cover(s) before closing the charging door.
- 4. The charging door must be fully closed before driving the vehicle.

#### Unlock Charging Connector in Emergency



If the charging connector does not disconnect from the charging inlet due to battery discharge and failure of electric wires, open the hood and slightly pull the emergency cable. The charging connector will be disconnected from the charging inlet.

#### **DC Charge**



DC fast charging (also known as Level 3 charging) provides high power DC current directly to the EV battery. DC charging stations are capable of charging the EV battery to 80% in less than 75 minutes under normal conditions.

While DC charging is very fast compared to AC charging, prolonged and continuous use of DC fast charging may reduce the long term life of the EV battery. Usage of a DC fast charger should be minimized when possible in order to help prolong the life of the EV battery.

Actual charger image and charging method may vary in accordance with the charger manufacturer.



#### Information

If you use a DC charger when the vehicle is already fully charged, some DC chargers will send out an error message. When the vehicle is fully charged, do not charge the vehicle.

#### How to Connect DC Charger

- Depress the brake pedal and apply the electronic parking brake.
- 2. Shift to P (Park) and turn OFF the vehicle using the POWER button.

# *i* Information

If charging is initiated without the gear in P (Park), charging will start only after the gear is automatically shifted to P (Park).



 Unlock the vehicle before opening the charging door. From the outside the vehicle, push on the charging door in the area indicated by the arrow to open the door.

# *i* Information

If you cannot open the charging door due to freezing weather, tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door.



- 4. Remove the charging port dust cover (1).
- 5. Inspect the charging port to make sure it is free from any dust or debris.
- 6. Hold the charging connector handle firmly and insert the connector into the charging port all the way. If the connector is not completely inserted into the charging port, arcing may occur. This may cause a fire.
- 7. Check if the charging indicator light (5 ) of the high voltage battery in the instrument cluster is turned ON. Charging is not active when the charging indicator light (5 ) is OFF. If the charging indicator light is OFF, it may be necessary to disconnect the charging connector from the vehicle and repeat the connection process. Refer to the charging station display screen for more information.

During cold weather, DC charging may not be available to prevent high voltage battery degradation.

# *i* Information

To control the temperature of the high voltage battery while charging or when the battery temperature is high, the air conditioner is used to cool down the battery. It may generate noise or vibration from operation of the air conditioner compressor and cooling fan, but it is a normal condition when charging the high voltage battery. Also, the air conditioner's performance may be degraded due to operation of the cooling system to charge the high voltage battery. This is a normal condition.

# *i* Information

During charging, the gear cannot be shifted from P (Park) to any other gear.



8. After charging has started, the estimated charging time is displayed on the instrument cluster for about 1 minute.

If you open the driver seat door while charging, the estimated charging time is also displayed on the instrument cluster for about 1 minute.

# *i* Information

Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the battery may vary.

#### **Checking Charging Status**



When charging the high voltage battery, the charge level can be checked from outside the vehicle.

Lamp	status	
Before charging (illuminate)	While charging (blink)	Details
		High voltage battery level very low
yellow	yellow	
	*	High voltage battery level low
green	green	
		High voltage battery level middle
green	green	
		High voltage battery level high
green	green	

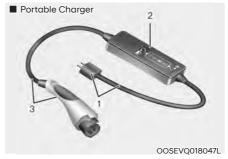
#### How to Disconnect DC Charger

 Refer to the instructions on the onscreen display of the DC charging station before disconnecting the charging connector from the vehicle. Once charging is stopped, remove the charging connector.



- Make sure to re-install the charging port dust cover(s) before closing the charging door.
- 3. The charging door must be fully closed before driving the vehicle.

#### **Portable Charge**

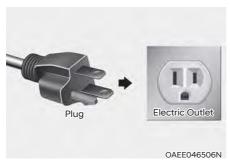


- (1) Code and Plug (Code set)
- (2) Control Box
- (3) Charging Cable and Charging Connector

A portable charger that is used for Level 1 charging on a standard wall outlet is stored in the vehicle rear cargo area.

Level 1 charging can be used when Level 2 AC charging or Level 3 DC fast charging is not available.

# How to set the charging rate of the portable chargery



Charging an electric vehicle at home can stress the household electrical system more than a typical household appliance. Most modern residential electrical circuits are rated at 15 or 20 amps. The EV portable charger is rated to supply a 12A continuous load. To avoid tripping a fuse or breaker in the household, the portable charger charging rate can be reduced. Follow the steps below to set the charging rate of the portable charger.

- Check the current output of the electrical outlet prior to connecting the portable charger in order to determine the permissible charging rate.
- 2. Connect the plug to a household electric outlet.
- Check the LED display on the portable charger controller. The indicator 8A, 10A or 12A will be displayed.



- 4. The charging rate (amps) can be adjusted on the portable charger controller. Press the button (1) on the back of the controller.
- 5. The charging rate (12A, 10A, 8A) on the LED display changes each time you press the button. Refer to the table to adjust the charging rate based on the electrical outlet current output.
- When the charging rate is set, follow the procedure in the next section to connect your vehicle.

#### \* Example for setting the ICCB charge level

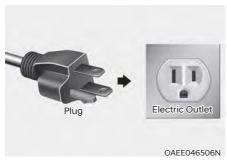
The example is only for reference and may vary according to the surrounding environment.

Outlet current	ICCB charge level	Control box display window
14-16A	12A	
13-12A	10A	→
11-10A	8A	OOSEVQ018055



Please make sure that charge level selection matches the capacity of your circuit breaker to avoid blown fuse.

# How to Connect Portable Charger (ICCB: In-Cable Control Box)



 Connect the plug to a household electric outlet.



- 2. Check if the power lamp (green) illuminates on the controller.
- 3. Depress the brake pedal and apply the electronic parking brake.
- 4. Shift to P (Park) and turn OFF the vehicle using the POWER button.



If charging is initiated without the gear in P (Park), charging will start only after the gear is automatically shifted to P (Park).



Unlock the vehicle before opening the charging door. Push on the charging door in the area indicated by the arrow to open the door.



If you cannot open the charging door due to freezing weather tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door.



- 6. Remove the charging port dust cover (1).
- 7. Inspect the charging port to make sure it is free from any dust or debris.
- Hold the charging connector handle firmly and insert the connector into the charging port all the way.
   If the connector is not completely inserted into the charging port, arcing may occur. This may cause a fire.

### *i* Information

Charging connector AUTO/LOCK mode The charging connector is locked in the inlet at a different period according to which mode is selected.

- LOCK mode: The connector locks when the charging connector is plugged into the charging inlet.
- AUTO mode: The connector locks when charging starts.

For more details, refer to "Charging Connector AUTO/ LOCK Mode" in this chapter.



- Charging starts automatically (charging lamp blinks).
- 10. Check if the charging indicator light (5 ) of the high voltage battery in the instrument cluster is turned ON. Charging is not active when the charging indicator light (5 ) is OFF. If the charging indicator light is OFF, it may be necessary to disconnect the charging connector from the vehicle and repeat the connection process.

# *i* Information

Note that the vehicle cannot be shifted out of Park (P) when the vehicle is charging.v



 After charging has started, the estimated charging time is displayed on the instrument cluster for about 1 minute.

If you open the driver seat door while charging, the estimated charging time is also displayed on the instrument cluster for about 1 minute. When scheduled charging or scheduled air conditioner/heater is set, the estimated charging time is displayed as "--".

# *i* Information

Depending on the condition and durability of the high voltage battery, charger specifications, and ambient temperature, the time required for charging the battery may vary.

#### **Checking Charging Status**



When charging the high voltage battery, the charge level can be checked from outside the vehicle.

Lamp	status	
Before charging (illuminate)	While charging (blink)	Details
		High voltage battery level very low
yellow	yellow	
		High voltage battery level low
green	green	
		High voltage battery level middle
green	green	
		High voltage battery level high
green	green	

<b>Charger</b>	
Portable	
Lamp for	
Indicator	
ing Status	
Charg	

	1			
Control Box	Indicator	ator	Details	
	<u> </u>	(Green)	On : Power on Blink : Plug temperature sensor failure	
	50	(Red)	On : Plug high temperature protection Blink : Plug high temperature warning	
	POWER	POWER	On : Power on	
<b>(</b>	CHARGE	CHARGE	Blink: Charging in power saving mode, only the CHARGE indicator is illuminated.	e CHARGE
) power	FAULT	FAULT	Blink : Charging interrupted	
CHARGE		12A	Charging current 12 A The charging current	* Back of the control box
₩ benutz	CHARGE LEVEL	10A	Charging current 10 A for 1 sec with the charger	sed
BA 10A 19A		8A	Charging current 18 A outlet but not the vehicle.	trical hicle.
		(Green)	Charging connector plugged	
5	VEHICLE	(Blue)	Charging	
		(Red)	Blink : Charging impossible	

# Charging Status Indicator Lamp for Portable Charger

O <sub>N</sub>	Control Box	Status / Diagnosis / Countermeasure	ON	Control Box	Status / Diagnosis / Countermeasure
<del>-</del>	COWER POWER	Charging connector plugged into vehicle (Green ON) Plug temperature sensor failure (Green blink) Plug high temperature protection (Red blink) Plug high temperature warning (Red ON) Contact an authorized HYUNDAI dealer.	7	COWER 1.20	- Charging connector plugged into vehicle (Green ON)
т	The state of the s	<ul> <li>While charging</li> <li>Charge indicator (Green blink)</li> <li>Vehicle indicator (Blue ON)</li> </ul>	4	CENT.	<ul> <li>Before plugging charging connector into vehicle (Red blink)</li> <li>Abnormal temperature</li> <li>ICCB (In-Cable Control Box) failure</li> </ul> Contact an authorized HYUNDAl dealer.

# Charging Status Indicator Lamp for Portable Charger

Status / Diagnosis / Countermeasure	<ul> <li>After plugging charging connector into vehicle (Red blink)</li> <li>Communication failure</li> <li>Contact an authorized HYUNDAI dealer.</li> </ul>	ode charging starts
Status / Diagnos	- After plugging charging c vehicle (Red blink) • Communication failure Contact an authorized HYU	<ul><li>Power saving mode</li><li>• 3 minutes after charging starts (Green blink)</li></ul>
Control Box	Samood Paris	黨
9 N	φ	ω
Status / Diagnosis / Countermeasure	<ul> <li>Plugged into vehicle (Red blink)</li> <li>Diagnostic device failure</li> <li>Current leakage</li> <li>Abnormal temperature</li> </ul> Contact an authorized HYUNDAI dealer.	Plug temperature sensor failure (Green blink) Plug high temperature protection (Red blink) Plug high temperature warning (Red
Status / Diagno	<ul> <li>Plugged into vehicle (Red I • Diagnostic device failure</li> <li>• Current leakage</li> <li>• Abnormal temperature</li> <li>Contact an authorized HYUN</li> </ul>	Plug temperatu (Green blink) Plug high temp (Red blink) Plug high temp
Control Box Status / Diagno	- Plugged into ve Diagnostic de Current leaka - Abnormal ten Contact an author	Plug temperatu (Green blink) Plug high temp (Red blink) Plug high temp

# How to Disconnect Portable Charger (ICCB: In-Cable Control Box)



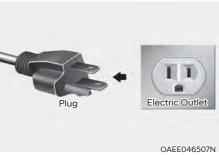
1. Hold the charging connector handle and pull it while pressing the release button (1).

# *i* Information

To prevent charging cable theft, the charging connector cannot be disconnected from the charging port when the doors are locked. Unlock all doors to disconnect the charging connector from the charging port. However, if the vehicle is in the charging connector AUTO mode, the charging connector automatically unlocks from the charging port when charging is completed. For more details, refer to "Charging Connector AUTO/LOCK Mode" in this chapter.



- Make sure to re-install the charging port dust cover(s) before closing the charging door.
- 3. The charging door must be fully closed before driving the vehicle.



- Disconnect the plug from the household electric outlet. Do not pull the cable when disconnecting the plug.
- 5. Re-apply the protective dust cover for the charging connector so that foreign material cannot get into the terminal.
- Carefully wrap the cord and store the portable charger inside the carrying case when you are finished charging.

#### **Charging Connector Manual Release**



If for some reason the charging connector fails to disconnect normally, the connector may be released manually using the Charging Connector Manual Release. Open the hood and slightly pull the manual release shown in the figure. The charging connector can then be disconnected.

# Precautions When Using the Portable Charger

- Use the portable charger that is certified by HYUNDAI.
- Do not try to repair, disassemble, or adjust the portable charger.
- If an extension cord is used it must be rated for heavy duty of at least 15A. Keep as short as possible.
- Stop using immediately when failure occurs.
- Do not touch the plug and charging connector with wet hands.
- Do not touch the terminal part of the AC charging connector and the AC charging port on the vehicle.
- Do not connect the charging connector to voltage that does not comply with regulations.
- Do not use the portable charger if it is worn, if any of the wiring is exposed, or if there are any signs of damage to the cable or connector.
- Do not let children operate or touch the portable charger.

- Do not let the controller to be in contact with water.
- Keep the normal charging connector or plug terminal free of foreign substances.
- Do not step on the cable or cord. Do not pull the cable or cord and do not twist or bend it.
- Do not attempt to charge the vehicle outside during inclement weather when there is the possibility of lightning.
- Do not drop the controller or place heavy objects on the equipment.
- Do not place an object that can generate high temperatures near the charger when charging.
- Before plugging into any electrical outlet, have a qualified electrician inspect and verify the household electrical system for heavy duty service at a 12 amp continuous load.
- Stop using the portable charger immediately if the household electric outlet or any components becomes overheated or has a burning smell.

#### **EV CHARGING - TROUBLESHOOTING**

#### **EV Charging Troubleshooting - Steps to Consider**

If the vehicle fails to charge after being plugged in to a charging station or if plugged in when using the portable charger, check the following:

- 1. Verify the charge mode is set to immediate. (for example, confirm that scheduled charging is turned OFF)
- 2. Check the operation status of the charging station or the portable charger.
- 3. Check to see if there are any warning messages in the LCD cluster. Refer to "LCD Display Messages" in this section.
- 4. If there is an error message on the charging station display screen, there may be a problem with the charging station. Try to charge the vehicle with a different charging station.
- 5. If the vehicle fails to charge with different charging station equipment, there may be a problem with the vehicle. Contact an authorized HYUNDAI dealer for inspection.

#### DRIVING AND OPERATING INFORMATION

#### **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).
- Depress and hold the brake pedal while pressing the Start/Stop button.
- 8. When the "\(\frac{1}{4}\)" 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.

# *i* 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 Start/Stop button and turn off the vehicle.
- 5. Check if the "\(\frac{1}{42}\)" indicator is turned OFF on the instrument cluster.

When the "\(\frac{1}{42}\)" 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**

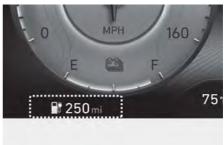
The Virtual Engine Sound System generates engine sound for pedestrians to hear vehicle sound because there is no sound while the Electric Vehicle (EV) is operating.

- If the vehicle is in the ready (=)
  mode and the gear is not in P (Park),
  the VESS will be operated.
- 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 gasolinepowered 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.

#### **Distance to Empty**



The location of where the vehicle range is displayed is different depending on which drive mode is active.

OOSEV041486N

For more details, refer to "Drive Mode System" in chapter 5.

#### When destination is not set

- On average, a vehicle can drive about 250 miles (400 km). Under certain circumstances where the air conditioner/heater is ON, the range is affected, resulting in a possible distance range from 210~250 miles (335~400 km). When using the heater during cold weather or driving at high speed, the high voltage battery consumes a lot more electricity. This may reduce the range significantly.
- After "---" has been displayed, the vehicle can drive an additional 2~5 miles (3~8 km) depending on driving speed, heater/air conditioner, weather, driving style, and other factors.

- The range that is displayed on the instrument cluster after completing a recharge may vary significantly depending on previous driving patterns.
  - When the previous driving patterns include aggressive or high speed driving (for example, predominantly highway miles, etc.), the estimated range on the next full charge will be lower than normal.
  - When the previous driving patterns are predominantly mild or economical (for example, city driving), the estimated range on the next full charge will be increased.
- Calculated range may depend on many factors such as the charge amount of the high voltage battery, weather, temperature, durability of the battery, geographical features, heater/air conditioning use and driving style. When the ambient temperature is low such as in winter, the actual driving distance may be reduced due to battery cold temperature effects.
- Natural degradation may occur with the high voltage battery depending on the number of years the vehicle is used. This may reduce the vehicle range.

#### Navigation - When a Destination is Set

When a destination is set using the vehicle navigation system (if equipped), the vehicle range may change. The vehicle range is recalculated using the destination route information. While driving, the range may vary based on traffic conditions, driving pattern and vehicle settings, etc.

#### Tips for Improving Range When Using the Climate Control System

- Operating the climate control system consumes electrical energy from the EV battery. Continuous use may reduce the vehicle range.
  - When using the climate control system, it is recommended to set the control to 72°F (22°C) AUTO. The climate control system has been optimized to operate at this setting for maximum comfort and efficiency.
- When possible, use the DRIVER ONLY feature on the climate control system. This will discontinue airflow to the passenger side and reduces climate control power consumption.

# Tips for Improving Range While Driving

- Depress and hold the accelerator pedal to maintain speed and drive economically.
- Gradually depress and release the accelerator pedal when accelerating or decelerating.
- Always maintain specified tire pressures.
- Do not use unnecessary electrical components while driving.
- Do not load unnecessary items in the vehicle.
- Do not mount parts that may increase air resistance.
- Set regen to a higher level 1-2 using the steering wheel paddles.

#### **Power/Charge Gauge**



The Power/Charge Gauge shows the energy consumption rate of the vehicle and the charge/discharge status of the regenerative brakes.

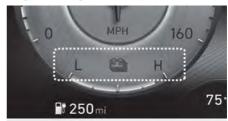
#### · POWER:

This portion of the gauge indicates the amount of electrical power supplied to the EV motor while driving.

#### · CHARGE:

This portion of the gauge indicates the amount of charging to the EV battery when regenerative braking is applied.

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



OOSEV042475N

- The SOC gauge shows the charging status of the high voltage battery.
- "L (Low)" position on the indicator indicates that there is not enough energy in the high voltage battery.
   "H (High)" position indicates that the driving battery is fully charged.
- When driving your vehicle for long distances on the highway or in rural areas, make sure to check that the State of Charge (SOC) is sufficient to get to your destination and make sure to map out useable charging locations along your route.

When there are 2 gauge bars (near the "L (Low)" on the SOC gauge, the warning light (() turns ON to alert you of the battery level.

When the warning light ( turns ON, the vehicle can drive an additional 12~18 miles (20~30 km) depending on the driving speed, heater/air conditioner, weather, driving style, and other factors. Charging is required.

#### NOTICE

When there are 1-2 gauge bars left for the high voltage battery, the vehicle speed is limited and then eventually the vehicle will turn OFF. Charge the vehicle immediately.

# Warning and Indicator Lights (related to electric vehicle)

#### 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 Start/Stop 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 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 Indicator Light



This indicator light illuminates:

When the power output from the vehicle is limited. The vehicle is in fail-safe mode

Power from the vehicle is limited due to one of the following reasons:

- The state of charge (SOC) of the high voltage battery is very low. Typically the Power Down Warning Light will turn ON when the SOC is below 3%.
- The temperature of the EV drive motor or the high voltage battery is either too high (overheating) or too low (freezing)
- There is a problem with either the cooling system or a vehicle system warning has occurred that may interrupt normal driving

#### **NOTICE**

- Do not accelerate or start the vehicle suddenly when the power down warning light is ON.
- When the power is limited for the safety of the high-powered parts of an electric vehicle, the power down indicator light illuminates. Your vehicle may not be driven, or may roll back on a slope with the indicator light ON due to the limitation of vehicle power.

#### Charging Indicator Light



This warning light illuminates:

When charging the high voltage battery.

#### High Voltage Battery Level Warning Light



This warning light illuminates:

- When the high voltage battery level is low.
- When the warning light turns ON, charge the battery immediately.

#### Regenerative Brake Warning Light



This warning light illuminates:

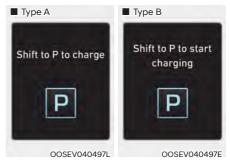
When the regenerative brake does not operate and the brake does not perform well. This causes the Brake Warning light (red) and Regenerative Brake Warning Light (yellow) to illuminate simultaneously.

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 may increase.

# LCD Display Messages Shift to P to start charging

Shift to P to start charging/ Shift to P to charge



This message is displayed if you connect the charging cable without the gear in the P (Park) position.

Shift to P (Park) before connecting the charging cable.

#### Remaining time

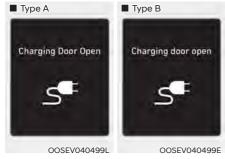


This message is displayed to notify the remaining time to charge the battery to the selected target battery charge level.

#### Unplug vehicle to start



This message is displayed when you start the vehicle without unplugging the charging cable. Unplug the charging cable, and then turn on the vehicle.



This message is displayed when you attempt to shift the vehicle out of P (Park) with the charging door open. You must close the charging door before driving the vehicle.

# Charging Stopped. Check the AC/DC charger/Charging stopped. Please check the AC/DC charger



- This warning message is displayed when charging is stopped for the reasons below:
  - There is a problem with the external AC charger or DC charger
  - The external AC charger stopped charging
  - The charging cable is damaged

If this warning message appears, check if there is a problem with the charging cable or connector, or if there is an error message on the charging station display screen.

If the same problem occurs when charging the vehicle with a normally operating AC charger or genuine HYUNDAI portable charger, have your vehicle inspected by an authorized HYUNDAI dealer.

# Charging Stopped. Check the cable connection/Charging interrupted. Please check the cable connection



This warning message is displayed when charging is stopped because the charging connector is not correctly connected to the vehicle charging port.

If this message is displayed, disconnect the charging cable from the vehicle charging port and reconnect it. Before reconnecting, check to make sure there is no foreign debris or damage to the connector or charging port on the vehicle.

If the same problem occurs when charging the vehicle with a replaced charging cable or genuine HYUNDAI portable charger, have your vehicle inspected by an authorized HYUNDAI dealer.

# Check regenerative brakes/Stop vehicle and check regenerative brakes



This warning message is displayed when the regenerative brake system does not work properly.

If this warning message is displayed, have the vehicle inspected by an authorized HYUNDAI dealer.

#### Low EV battery



When the high voltage battery level reaches below approximately 8%, this warning message is displayed.

The warning light on the instrument cluster () will turn ON simultaneously.

Charge the high voltage battery immediately.

#### Charge immediately. Power limited

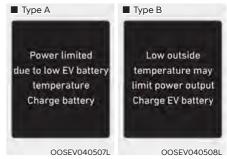


When the high voltage battery level reaches below approximately 5%, this warning message is displayed.

The warning light on the instrument cluster () and the power down warning light () will turn on simultaneously.

The vehicle's power will be reduced to minimize the energy consumption of the high voltage battery. Charge the battery immediately.

Power limited due to low EV battery temperature. Charge battery/Low outside temperature may limit power output. Charge EV battery



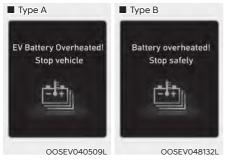
Both warning messages are displayed to protect electric vehicle system when outside temperature is low. If the high voltage battery charging level is low and parked outside in low temperature for a long time, vehicle power could be limited.

Charging the battery before driving helps increase power.

#### NOTICE

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

# EV Battery Overheated! Stop vehicle/Battery overheated! Stop safely



This warning message is displayed to protect battery and electric vehicle system when the high voltage battery temperature is too high.

Turn off the Start/Stop button and stop the vehicle so that the battery temperature decreases.

#### Power limited



This warning message is displayed:

- When the high voltage battery is below a certain level, or voltage is decreasing.
- When the temperature of the motor or high voltage battery is too high or too low.
- When there is a problem with the cooling system or a failure that may interrupt normal driving.

#### NOTICE

- When this warning message is displayed, do not accelerate or start the vehicle suddenly.
- When the power is limited for the safety of the high-powered parts of an electric vehicle, the warning message is displayed. Your vehicle may not be driven, or may roll back on a slope with the warning message displayed due to the limitation of vehicle power.

#### Stop vehicle and check power supply/Stop safely and check power supply



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

If this warning message is displayed, park your vehicle in a safe location and have your vehicle towed to the nearest authorized HYUNDAI dealer and have the vehicle inspected.

#### Check virtual engine sound system



This message is displayed when there is a problem with the Virtual Engine Sound System (VESS).

If this warning message is displayed, have your vehicle inspected by an authorized HYUNDAI dealer.

#### Check electric vehicle system



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

Refrain from driving when the warning message is displayed.

If this warning message is displayed, have your vehicle inspected by an authorized HYUNDAI dealer.

#### **Energy Flow**

The electric vehicle system informs the drivers its energy flow in various operating modes. While driving, the current energy flow is specified in three modes.

#### Vehicle stop



The vehicle is stopped. (No energy flow)

#### EV propulsion



Only the motor power is used to drive the vehicle.

(Battery → Wheel)

#### Regeneration



The high-voltage battery is charged up by the regenerative brake system. (Wheel → Battery)

#### **Aux. Battery Saver+**

The Aux. Battery Saver+ is a function that monitors the charging status of the 12 V auxiliary battery.

If the auxiliary battery level is low, the main high voltage battery charges the auxiliary battery.

# Information

The Aux. Battery Saver+ function will be ON when the vehicle is delivered. If the function is not needed.

#### Mode

· Cycle Mode:

When the Start/Stop button is in the OFF position with all doors, hood and liftgate closed, the Aux. Battery Saver+ periodically activates according to the auxiliary battery status.

· Automatic Mode:

When the Start/Stop button is in the ON position with the charging connector plugged in, the function activates according to the auxiliary battery status to prevent over discharge of the auxiliary battery.

# *i* Information

• The Aux. Battery Saver+ activates for a maximum of 20 minutes. If the Aux Battery Saver+ function activates for more than 10 times consecutively in automatic mode, the function will be disabled. (Note: There may be a problem with the 12V auxiliary battery.)

If the vehicle is driven normally and 12V battery is able to charge normally, the Aux. Battery Saver+ function will be enabled again.

- The Aux. Battery Saver+ function cannot prevent battery discharge if the auxiliary battery is damaged, worn out, used as a power supply or unauthorized electronic devices are used.
- If the Aux. Battery Saver+ function was activated, the high voltage battery level may have decreased.

# **MARNING**



When the function is activating the indicator lamp will illuminate and high voltage electricity will be flowing in the vehicle. Do not touch the high voltage electric wire (orange), connector, and all electric components and devices. This may cause electric shock and lead to injuries. Also, do not modify your vehicle in any way. This may affect your vehicle performance and lead to an accident.

#### SAFETY PRECAUTIONS FOR ELECTRIC VEHICLE

#### If an Accident Occurs

# <u>∧</u> v

#### WARNING

- When a vehicle accident occurs, move the vehicle to a safe place, turn OFF the vehicle and remove the auxiliary battery (12 V) terminal to prevent high voltage electricity from flowing.
- If electric wires are exposed from inside or outside the vehicle, do not touch the wires.

Also, do not touch the high voltage electric wire (orange), connector, and all electric components and devices. This may cause electric shock and lead to injuries.

# 1

#### ! WARNING

- When a vehicle accident occurs and the high voltage battery is damaged, harmful gas and electrolytes may leak. Be careful not to touch the leaked liquid.
- When you suspect leakage of inflammable gas and other harmful gases, open the windows and evacuate to a safe place. If any leaked fluid comes in contact with your eyes or skin, immediately clean the affected area thoroughly with tap water or saline solution and have doctors inspect it as soon as possible.

# A

#### WARNING

- If a small scale fire occurs, use a fire extinguisher (ABC, BC) that is meant for electrical fires. If it is impossible to extinguish the fire in the early stage, maintain a safe distance from the vehicle and immediately call 911. Also, advise them that an electric vehicle is involved.
- If the fire spreads to the high voltage battery, large amount of water is needed to put out the fire. Using small amount of water or fire extinguishers not meant for electrical fires could cause serious injury or death from electrical shocks.



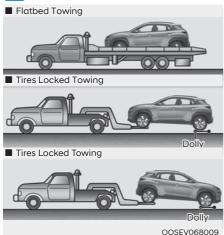
#### **!** WARNING

If you cannot put out the fire immediately, the high voltage battery may explode. Evacuate to a safe place and do not let other people approach the site.

Contact the fire department and notify them of an electric vehicle fire.

 If the vehicle is flooded with water, immediately turn off the vehicle and evacuate to a safe place. Contact the fire department or an authorized HYUNDAI dealer.

# **WARNING**



If towing is required, lift all four wheels off the ground and tow the vehicle. If you must tow the vehicle using only two wheels, lift the front wheels off the ground and tow the vehicle.

If necessary to roll the vehicle so that it can be rolled onto a flatbed tow truck perform the following:

- First, depress the brake pedal and release the parking brake.
- While depressing the brake pedal shift to the N (Neutral) position and press the POWER button to turn the vehicle off.
- Wait 3 minutes or more before opening the driver door and the vehicle will remain in ACC mode and in Neutral.
- If the driver door is opened within the 3 minute period, the vehicle will automatically shift to P (Park), the vehicle will turn OFF and the front wheels will be remained locked.

# WARNING



- If you tow the vehicle while the front wheels are touching the ground, the vehicle motor may generate electricity and the motor components may be damaged or a fire may occur.
- When a vehicle fire occurs due to the battery, there is a risk of a second fire. Contact 911 when towing the vehicle.

#### **Additional Precautions**

- When you paint or apply heat treatment to the vehicle as a result of an accident, the performance of the high voltage battery can be reduced.
   If heat treatment is required, contact an authorized HYUNDAI dealer.
- When you clean the motor compartment, do not use high pressure water to wash. This may cause an electric shock due to a discharge in high voltage electricity, or damage the vehicle's electric system.
- Do not use, remodel, or install nongenuine parts. This may damage the electric power system.

#### **Service Interlock Connector**



In case of emergency, cut the service interlock connector cable to isolate the high voltage of the battery.



#### **WARNING**

Never disconnect the service interlock connector or cut the wire except in an emergency situation.

Serious problems may occur, such as the vehicle will not start.

#### **Service Plug**





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.

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The actual shape may differ from the illustration.

#### OOSEV011003N

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## **INTERIOR OVERVIEW (II)**



The actual shape may differ from the illustration.

OOSEV010004L

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## **MOTOR COMPARTMENT**



The actual motor compartment in the vehicle may differ from the illustration.

OOSEV078001

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3.	Fuse box	9-43	6.	Windshield washer fluid reservoir	.9-14

## **DIMENSIONS**

Items	In (mm)
Overall length	165.6 (4,205)
Overall width	70.9 (1,800)
Overall height	61.2 (1,555) / 61.8 (1,570) *1
Front tread	61.6(1,564)
Rear tread	62.0 (1,575)
Wheelbase	102.4 (2,600)

<sup>\*1:</sup> with roof rack

## **ELECTRIC VEHICLE SPECIFICATIONS**

Items		Specifications	
Makan	Max. output	150 kW	
Motor	Max. torque	395 Nm	
	Capacity	64 kWh	
Battery (Lithium-ion Polymer)	Power output	170 kW	
(Eldinam form olymer)	Voltage	356 V	
Charger (OBC) Max. Output		7.2 kW	

OBC: On-Board Battery Chargers

## **BULB WATTAGE**

Light Bulb			Bulb Type	Wattage
		Low (Type A)	HB3	65
		High (Type A)	HB3	65
	Headlight	Low (Type B)	LED	LED
		High (Type B)	LED	LED
Front	Turn signal lamp		PY21W	21
	Turn signal lamp (Ou	tside mirror)	LED	LED
	Daytime running lam position lamp	np (DRL) /	LED	LED
	Side marker		LED	LED
		Stop/Tail (Type A)	P21/5W	5
		Tail (Type A)	W5W	5W
	Rear combination lamp	Stop/Tail (Type B)	LED	LED
		Turn signal	P21W	PY21W
Rear		Back up	P21W	21
		Fog lamp	PR21W	21
	Side marker	Туре А	W5W	5W
	Side Illaikei	Туре В	LED	LED
	High mounted stop I	amp	LED	LED
	License plate lamp		W5W	5
	Manlama	Type A	W10W	10
	Map lamp	Туре В	LED	LED
	Room lamp	Type A	FESTOON	8
Interior	Koom amp	Туре В	LED	LED
	Vanity mirror lamp		FESTOON	5
	Luggage	Type A	FESTOON	10
	compartment lamp	Туре В	LED	LED

#### **TIRES AND WHEELS**

lt	Tire size	Wheel	Inflation pressure psi (kPa)			Wheel bolt torque kgf·m (lbf·ft, N·m)	
Item	Tire Size	size	Norma	l load *1	Maxim	ım load	_
			Front	Rear	Front	Rear	(lbf-ft, N-m)
Full size tire	215/55 R17	7.0J X 17	250 (36)	250 (36)	250 (36)	250 (36)	11~13 (79~94, 107~127)

<sup>\*1:</sup> Normal load: Up to 3 persons

### NOTICE

- It is permissible to add 3 psi (20 kPa) to the standard tire pressure specification if
  colder temperatures are expected soon. Tires typically lose 1 psi (7 kPa) for every
  12°F (7°C) temperature drop. If extreme temperature variations are expected,
  recheck your tire pressures as necessary to keep them properly inflated.
- As 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 (+10 kPa/1 km)).

# **A** CAUTION

When replacing tires, ALWAYS use the same size, type, brand, construction and tread pattern supplied with the vehicle. If not, replaced tires can damage the related parts or make them work irregularly.

## **AIR CONDITIONING SYSTEM**

li li	tems	Weight of volume	Classification
Refrigerant	With standard climate control system	19.4 ± 0.9 (550 ± 5)	
	With inner condenser	22.9 ± 0.9 (650 ± 25)	R-1234yf
oz. (g) With inner condenser		35.3 ± 0.9 (1,000 ± 5)	
Compressor lubrica	nt oz. (g)	6.34 ± 0.35 (180 ± 10)	POE

For more details, contact an authorized HYUNDAI dealer.

## **VOLUME AND WEIGHT**

Gross vehicle weight	Luggage volume		
Gross verlicie weight	Min.	Max.	
4,762 lbs. (2,160 kg)	11.7 cu ft (332 l)	39.3 cu ft (1,114 l)	

Min : Behind rear seat to roof Max : Behind front seat to roof

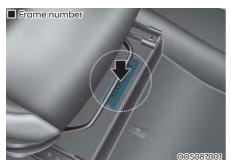
## **RECOMMENDED LUBRICANTS AND CAPACITIES**

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		0.26 ~ 0.29 US gallon (1.0 ~ 1.1 ℓ)	70W, API GL-4, TCGO-9(MS517-14) or other brands meeting the above specification approved by HYUNDAI Motor Co.
Coolant	without heat pump	3.3 ~ 3.4 US gallon (12.5 ~13 ℓ)	Designated coolant water for electric vehicles
	with heat pump	3.6 ~ 3.5 US gallon (13 ~13.4 ℓ)	
Brake fluid		0.18 ~ 0.21 US gallon (0.7 ~ 0.8 ℓ)	SAE J1704 DOT-4 LV, FMVSS 116 DOT-4, ISO 4925 CLASS-6

# VEHICLE IDENTIFICATION NUMBER (VIN)



The vehicle identification number (VIN) is the number used in registering your vehicle and in all legal matters pertaining to its ownership, etc.

The number is punched on the floor under the right front seat. To check the number, open the cover.



The VIN is also on a plate attached to the top of the left side dashboard. The number on the plate can easily be seen through the windshield from outside.

# VEHICLE CERTIFICATION LABEL



The vehicle certification label attached on the driver's (or front passenger's) side center pillar gives the vehicle identification number (VIN).

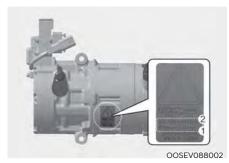
# TIRE SPECIFICATION AND PRESSURE LABEL



The tires supplied on your new vehicle are chosen to provide the best performance for normal driving.

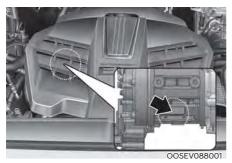
The tire label located on the driver's side center pillar gives the tire pressures recommended for your vehicle.

# AIR CONDITIONER COMPRESSOR LABEL



A compressor label informs you the type of compressor your vehicle is equipped with such as model, supplier part number, production number, refrigerant (1) and refrigerant oil (2).

#### **MOTOR NUMBER**



The motor number is stamped on the motor block as shown in the drawing. 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 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.

# 3. Safety System

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 System. Larger children should use a booster seat with the lap/shoulder belt until they can use the seat belt properly without a booster seat.

### **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 short 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 and 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 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.

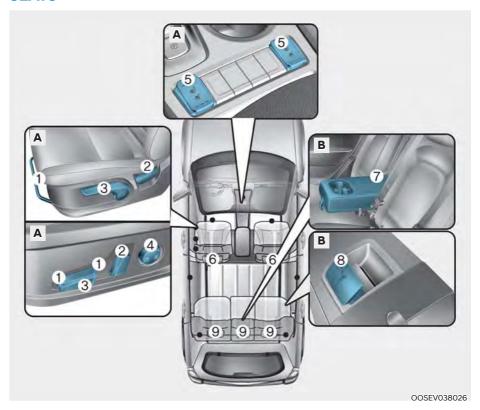
### **Control Your Speed**

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**



[A]: Front seat, [B]: Rear seat

#### Front seat

- (1) Forward and backward
- (2) Seatback angle
- (3) Seat cushion height\*
- (4) Lumbar support (Driver's seat)\*
- (5) Seat warmer\*/Air ventilation seat\*
- (6) Head Restraint

#### Rear seat

- (7) Armrest\*
- (8) Seatback folding
- (9) Head Restraint
- \*: if equipped

#### **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 seat belts and air bags, in an accident.



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. Move your seat as far back as possible from front air bags, while still maintaining control of the vehicle.

# **MARNING**

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 control the vehicle.
- Adjust the front passenger seat as far to the rear as possible.
- Hold the steering wheel by the rim with your hands at the 9 o'clock and 3 o'clock positions to minimize the risk of injuries to your hands and arms.
- NEVER place anything or anyone between you and the 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. Children who have outgrown a booster seat and adults 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**

The front seat can be adjusted by using the control lever (or knob) or 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

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.
- If there are occupants in the rear seats, be careful while adjusting the front seat position.
- Make sure that the seat is locked in place after the adjustment. If not, the seat might move unexpectedly resulting in an accident.



## **♠** 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.

#### Manual adjustment (if equipped)



Forward and rearward adjustment

To move the seat forward or rearward:

- 1. Pull up the seat slide adjustment lever and hold it.
- 2. Slide the seat to the position you desire.
- Release the lever and make sure the seat is locked in place. Move forward and rearward without using the lever. If the seat moves, it is not locked properly.



#### Seatback angle

To recline the seatback:

- 1. Lean forward slightly and lift up the seatback lever.
- Carefully lean back on the seat and adjust the seatback to the position you desire.
- 3. Release the knob and make sure the seatback is locked in place.

#### Reclining seatback

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/or air bags) are greatly reduced by reclining your seatback.



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.

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 height

To change the height of the seat cushion:

- Push down the lever several times, to lower the seat cushion.
- Pull up the lever several times, to raise the seat cushion.

#### Power adjustment (if equipped)

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



Forward and rearward adjustment

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 recline the seatback:

- 1. Push the 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 protections 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 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 (1, if equipped)

To change the angle of the front part of the 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 cushion height (2, if equipped)

To change the height of the seat cushion:

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

Release the switch once the seat reaches the desired position.

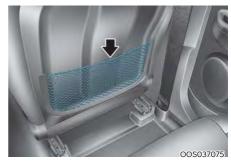


# Lumbar support (for driver's seat, if equipped)

To adjust the lumbar support:

- Press the front portion of the switch (1) to increase support or the rear portion of the switch (2) to decrease support.
- 2. Release the switch once it reaches the desired position.

## Seatback pocket (if equipped)



The seatback pocket is provided on the back of the seats.



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

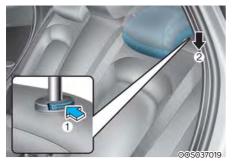
#### **Rear Seats**

#### 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:

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



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





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



5. To use the rear seat, lift and push the seatback rearward.

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

Return the belt in the guide.

## 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.



## **↑** CAUTION

Damaging rear seat belt buckles When you fold the rear seatback, insert the buckle in the pocketbetween the rear seatback and cushion. Doing so can prevent the buckle from being damaged by the rear seatback.



#### **WARNING**

Make sure the vehicle is off, the vehicle is 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.



## WARNING

Cargo should always be secured to prevent it from being thrown about the vehicle in a collision and causing injury to the vehicle occupants. Do not place objects in the rear seats, since they cannot be properly secured and may hit the front seat occupants in a collision.

#### Armrest (if equipped)



The armrest is located in the center of the rear seat. Pull the armrest down by using the strap from the seatback to use it.

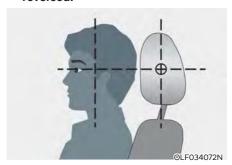
#### **Head Restraint**

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 restraint 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

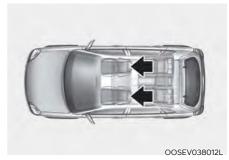
To prevent damage, NEVER hit or pull on the head restraints.



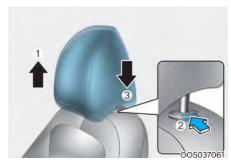
#### **CAUTION**

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



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).



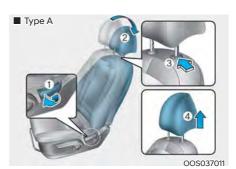
Forward and rearward adjustment (if equipped)

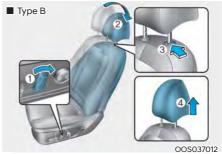
The head restraint may be adjusted forward to 3 different positions by pulling the head restraint forward to the desired detent. To adjust the head restraint to it's furthest rearwards position, pull it fully forward to the farthest position and release it.



## NOTICE

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.





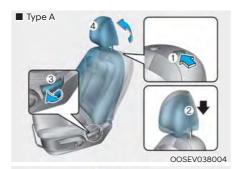
#### Removal/Reinstall

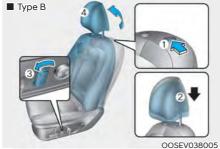
To remove the head restraint:

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



NEVER allow anyone to travel in a seat with the head restraint removed.





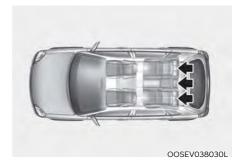
To reinstall the head restraint:

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

## **MARNING**

Always make sure the head restraint locks into position after reinstalling and adjusting it properly.

#### Rear seat head restraints



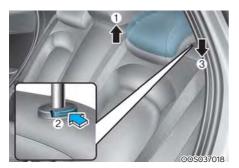
The rear seats are equipped with head restraints in all the seating positions for the passenger's safety and comfort.

## **A** CAUTION

 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.



 When sitting on the rear seat, do not adjust the height of the head restraint to the lowest.

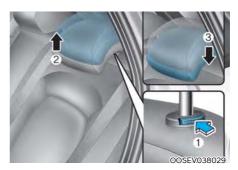


Adjusting the height up and down To raise the head restraint:

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).



#### Removal/Reinstallation

To remove the head restraint:

- Raise the head restraint as far as it can go.
- 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.



## **WARNING**

Make sure the head restraint locks in position after adjusting it to properly protect the occupants.

# 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.
- Fatiqued 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.



While the vehicle is running, 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:



- 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 whenever the START/STOP button is placed to the ON position.

## *i* 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)



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 running, push the switch to cool the driver's seat or the front passenger's seat (if equipped).

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



- 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 default to the OFF position whenever the START/ STOP 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 your vehicle inspected by an authorized HYUNDAI dealer.

#### **SEAT BELTS**

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

#### **Seat Belt Safety Precautions**

Always fasten your seat belt and make sure all passengers have fastened their seat belts before starting any trip. 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:

- Children under the age of 13 should be properly restrained in the rear seats.
- Never allow children to ride in the front passenger seat, unless the air bag is deactivated. If a child is seated in the front passenger seat, move the seat as far back as possible. And the child must always be restrained in the seat properly.
- NEVER allow an infant or child to be carried on an occupant's lap.
- NEVER ride with the seatback reclined when the vehicle is moving.
- Do not allow children to share a seat or seat belt.
- Do not wear the shoulder belt under your arm or behind your back.

- Never wear a seat belt over fragile objects. If there is a sudden stop or impact, the seat belt can damage it.
- Do not use the seat belt if it is twisted. A twisted seat belt will not protect you properly in 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, because any materials in the buckle can cause the seat belt not to be fastened 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



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 START/STOP button is turned on regardless of belt fastening. If the driver's seat belt is not fastened, the warning chime will sound for about 6 seconds.

If the seat belt is not fastened when the START/STOP button is turned on or if it is disconnected after the START/ STOP button is turned on, the seat belt warning light will illuminate until the belt is fastened.

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive under 12 mph (20 km/h), the corresponding warning light will continue to illuminate until you fasten the seat belt.

If you continue to drive without the seat belt fastened or you unfasten the seat belt when 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.



Front passenger's seat belt warning

As a reminder to the front passenger, the front passenger's seat belt warning light will illuminate for approximately 6 seconds each time the START/STOP button is turned on regardless of belt fastening. If the seat belt is not fastened when the START/STOP button is turned on or if it is disconnected after the START/STOP button is turned on, the seat belt warning light will illuminate until the belt is fastened.

If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive under 12 mph (20 km/h), the corresponding warning light will continue to illuminate until you fasten the seat belt.

If you continue to drive without the seat belt fastened or you unfasten the seat belt when 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.

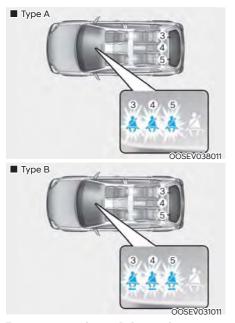


#### WARNING

Riding in an improper position adversely affects the front passenger's seat belt warning system. It is important for the driver to instruct the passenger to be seated properly as instructed in this manual.

## *i* Information

- You can find the front passenger's seat belt warning light on the center fascia panel.
- Although the front passenger seat is not occupied, the seat belt warning light will blink or illuminate for 6 seconds.
- The front passenger's seat belt warning may operate when luggage is placed on the front passenger seat.



Rear passenger's seat belt warning (if equipped)

 As a reminder to the rear passenger, the rear passenger's seat belt warning lights will illuminate for approximately 6 seconds each time the START/STOP button is turned on regardless of belt fastening.

- As a reminder to the rear passenger, the rear passenger's seat belt warning lights will illuminate for approximately 6 seconds each time you turn the START/STOP button ON regardless of belt fastening.
- If the seat belt is not fastened when the START/STOP button is turned ON, the seat belt warning light will illuminate for approximately 70 seconds.
- If you start to drive without the seat belt fastened or you unfasten the seat belt when you drive under 12 mph (20 km/h), the corresponding warning light will continue to illuminate for approximately 70 seconds.
- If you unfasten the seat belt when you drive over 12 mph (20 km/h), the seat belt warning chime will sound for approximately 35 seconds and the corresponding warning light will blink.
- If the seat belt is fastened, the warning light will turn off immediately.
- If the rear door is opened or closed under 6 mph (10 km/h), warning light and warning sound does not work even if driving over 12 mph (20 km/h).

## **Seat Belt Restraint System**

Lap/shoulder belt



To fasten your seat belt:

Pull it 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.



# A

### WARNING

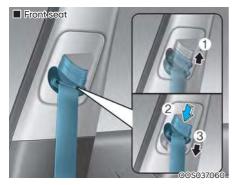
Improperly positioned seat belts may increase the risk of serious injury in an accident. Take the following precautions when adjusting the seat belt:

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

### Height adjustment

You can adjust the height of the shoulder belt anchor to one of the four 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.



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.

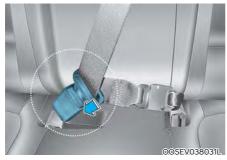


To release your seat belt:

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 center seatbelt (3-point rear center seat belt)



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

### *i* 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.

### <u></u> ₩

### WARNING

Make sure that the seatback is locked in place when using the rear center seat belt.

If not, the seatback may move when there is a sudden stop or collision, which could result in serious injury.

### Pre-tensioner seat belt



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 or side 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) 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 or side 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.

### A

### 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 yourself.
   This must be done by an authorized HYUNDAI dealer.
- Do not hit the seat belt assemblies.



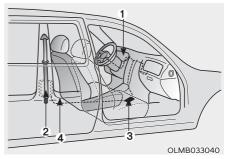
#### WARNING

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-tensioner can become hot and can burn you.



### **CAUTION**

Body work on the front area of the vehicle may damage the pre-tensioner seat belt system. Therefore, have the system serviced by an authorized HYUNDAI dealer.



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) Emergency fastening device

### NOTICE

The sensor that activates the SRS control module is connected with the pre-tensioner seat belts. The SRS air bag warning light on the instrument cluster will illuminate for approximately 6 seconds after the START/STOP button is placed in 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.

### *i* Information

- Pre-tensioner seat belts may be activated in certain frontal or side collisions or rollover situations (if equipped with rollover sensor).
- 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 pretensioner 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 below your belly so that it fits SNUGLY across your hips and pelvic bone, under the rounded part of the belly.



### WARNING

- Pregnant women and patients are 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 tear off the child from 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 should 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. A child's squirming could put the belt out of position. In the event of an accident, children are afforded the best safety restrained by a proper Child Restraint System in the rear seats.

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 larger children's seat belts are worn and properly adjusted.
- NEVER allow the shoulder belt to contact the child's neck or face.
- Do not allow more than one child to use a single seat belt.

### Seat belt use and injured people

A seat belt should 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 systems (seat belts and/or air bags) are greatly reduced by reclining your seatback.

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

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

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

### $\triangle$

#### 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 with the seatbacks upright and should be belted properly.

### **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.

### 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 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 should 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 System must use the seat belts provided.

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

The laws governing the age or height/ weight restrictions at which seat belts can be used instead of Child Restraint System differs among states, so you should be aware of the specific requirements in your country, 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 rearward-facing or forward-facing CRS that has first been properly secured to the seat of the vehicle. Read and comply with the instructions for installation and use provided by the manufacturer of the Child Restraint System.



### 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 an authorized HYUNDAI dealer check the child restraint system, seat belts, tether anchors and lower anchors.

### Selecting a Child Restraint System (CRS)

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

- Make sure the Child Restraint System has a label certifying that it meets applicable Federal Motor Vehicle Safety Standards (FMVSS 213).
- Select a Child Restraint System based on your child's height and weight. The required label or the instructions for use typically provide this information.
- Select a Child Restraint System that fits the vehicle seating position where it 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, forward-facing and booster Child Restraint Systems.

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



Rearward-facing Child Restraint System

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

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

Keep using Child Restraint Systems in the rearward-facing position as long as children fit within the height and weight limits allowed by the Child Restraint System's manufacturer.

Continue using Child Restraint Systems in the rearward-facing position as long as children fit within the height and weight limits allowed by the Child Restraint System's manufacturer. It's the best way to keep them safe. Once your child has outgrown the rearward-facing Child Restraint System, your child is ready for a forward-facing Child Restraint System with a harness.

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.



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

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

#### **Booster seats**

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

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

# 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 System.

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 Restraint System, the head restraint of the respective seating position shall be readjusted or entirely removed.

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

 Properly secure the Child Restraint System to the vehicle. All Child Restraint Systems must be secured to the vehicle with the lap belt or lap part of a lap/shoulder part of a lap/shoulder belt or with the LATCH system.

- Make sure the Child Restraint System is firmly secured. After installing a Child Restraint System to the vehicle, push and pull the seat forward and from side-to-side to verify that it is securely attached to the seat. A Child Restraint System secured with a seat belt should be installed as firmly as possible. However, some side-to-side movement can be expected.
  - When installing a Child Restraint System, adjust the vehicle seat and seatback (up and down, forward and rearward) so that your child fits in the Child Restraint System in a comfortable manner.
- Secure the child in the Child Restraint System. Make sure the child is properly strapped in the Child Restraint System according to the Child Restraint System manufacturer's instructions.



### **CAUTION**

A Child Restraint System 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 System.

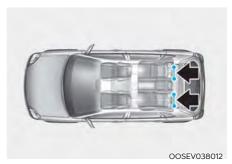
## Lower Anchors and Tether for Children (LATCH System)

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

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

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

The Child Restraint System manufacturer will provide you with instructions on how to use the Child Restraint System with its attachments for the LATCH anchorages.



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.



[A]: Lower Anchor Position Indicator

[B]: 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.

### A

### **WARNING**

Before installing the Child Restraint System, make sure that there are no objects (for example, toy, pen, wire) around the lower anchor area. Those objects may damage either the seat belt system or the Child Restraint System during the installment procedure. If necessary, have the vehicle inspected by an authorized HYUNDAI dealer.

## Securing a Child Restraint System with the "LATCH Anchors System"

To install a LATCH-compatible Child Restraint System in either of the rear outboard seating positions:

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

Take the following precautions when using the LATCH system:

- Read and follow all installation instructions provided with your Child Restraint System.
- To prevent the child from reaching and taking hold of unretracted seat belts, buckle all unused rear seat belts and retract the seat belt webbing behind the child. Children can be strangled if a shoulder belt becomes wrapped around their neck and the seat belt tightens.
- NEVER attach more than one Child Restraint System to a single anchorage. This could cause the anchor or attachment to come loose or break.
- Always have the LATCH system inspected by your dealer after an accident. An accident can damage the LATCH system and may not properly secure the Child Restraint System.

### 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 System seat with "Tether Anchor" system



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.



#### To install the tether anchor:

- Route the Child Restraint System top-tether strap over the seatback. Route the tether strap under the head restraint and between the head restraint posts, or route the tether strap over the top of the vehicle seatback. Make sure the strap is not twisted.
- Connect the tether strap hook to the tether anchor, then tighten the top-tether strap according to the instructions of your Child Restraint System's manufacturer to firmly attach the Child Restraint System to the seat.
- Check that the Child Restraint System is securely attached to the seat by pushing and pulling the seat forwardand-back and side-to-side.

## **MARNING**

Take the following precautions when installing the top-tether:

- Read and follow all installation instructions provided with your Child Restraint System.
- NEVER attach more than one Child Restraint System to a single tether anchor. This could cause the anchorage or attachment to come loose or break.
- Do not attach the tether strap to anything other than the correct top-tether anchor. It may not work properly if attached to something else.
- Child Restraint System anchors are designed to withstand only those loads imposed by correctly fitted Child Restraint System.
  - Do not use them for adult seat belts, harnesses, or for attaching other items or equipment to the vehicle.

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



### WARNING

ALWAYS place a rearward-facing Child Restraint System in the rear seat of the vehicle.

Placing a rearward-facing child restraint in the front seat can result in serious injury or death if the Child Restraint System is struck by an inflating air bag.

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



#### Automatic locking mode

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

The "Automatic Locking" mode will help prevent the normal movement of the child in the vehicle from causing the seat belt to loosen and compromise the Child Restraint System. To secure a Child Restraint System, use the following procedure.

To install a Child Restraint System on the rear seats, do the following:

 Place the Child Restraint System on a rear seat and route the lap/shoulder belt around or through the Child Restraint System, following the Child Restraint System manufacturer's instructions. Make sure the seat belt webbing is not twisted.

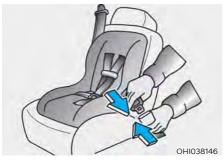


### Information

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.



2. Make sure to insert the belt into the guide (1) and check that the seat belt is not twisted.



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



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



4. 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.



- 5. 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.
- 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.
- 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.
- 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 Child Restraint System manufacturer instructs or recommends you to use a tether anchor with the lap/shoulder belt, refer to the previous pages for more information.

## *i* Information

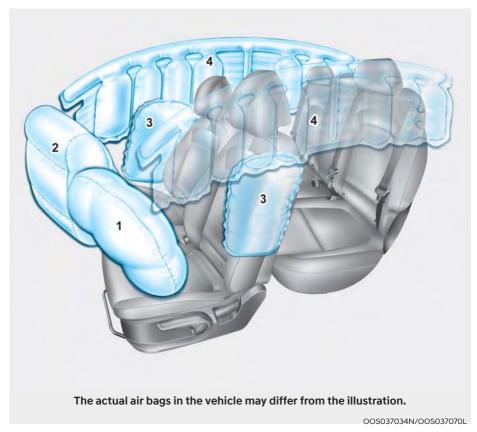
When the seat belt is allowed to retract to its fully stowed position, the retractor will automatically switch from the "Automatic Locking" mode to the emergency lock mode for normal adult usage.

### **MARNING**

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 retractor to the "Automatic Locking" mode.

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

### **AIR BAG - SUPPLEMENTAL RESTRAINT SYSTEM**



- 1. Driver's front air bag
- 2. Passenger's front air bag

- 3. Side air bag\*
- 4. Curtain air bag\*
- \*: if equipped

This vehicle is equipped with a 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.



#### AIR BAG SAFETY PRECAUTIONS

ALWAYS use seat belts and Child Restraint Systems - 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 System or booster seat in the front passenger seat, unless the air bag is deactivated.

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 the vehicle 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 in. (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 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, in the driver's side lower crash pad below the steering wheel, and the passenger's side front panel pad above the glove box.

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

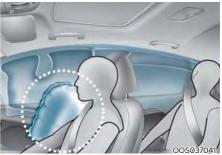
The purpose of the SRS is to provide the vehicle's driver and front passengers with additional protection than that offered by the seat belt system alone. The SRS uses sensors to gather information about the driver's and front passenger's seat belt usage and impact severity. The seat belt buckle sensors determine if the driver and front passenger's seat belts are fastened. These sensors provide the ability to control the SRS deployment based on whether or not the seat belts are fastened, and how severe the impact is. The 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, and seat belt usage, 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.

To reduce the risk of serious injury or death from 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.
- Do not attach any objects on the front windshield and inside mirror.

### Side air bags (if equipped)





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 and front center air bag are designed to deploy during certain side impact collisions, depending on the crash severity.

For vehicles equipped with a rollover sensor the front center air bag, side and/ or curtain air bags and pre-tensioners on both sides of the vehicle may deploy if a rollover or possible rollover is detected.

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

To help 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 hang other objects except clothes. In an accident they may cause vehicle damage or personal injury especially when air bag is inflated.
- 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 put any objects between the side airbag label and seat cushion.
   They could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.
- Do not install any accessories on the side or near the side air bags.
- Do not cause impact to the doors when the START/STOP button is in 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





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.

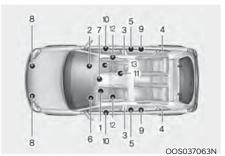
For vehicles equipped with a rollover sensor the side and/or curtain air bags and pre-tensioners on both sides of the vehicle may deploy if a rollover or possible rollover is detected.

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

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 Restraint System 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 where 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, these 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 bags yourself. If necessary, have the air bag inspected by an authorized HYUNDAI dealer.

# How does the Air Bags 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 (acceleration)
- (10) Side impact sensors (pressure)
- (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 ignition switch is ON 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 (Supplemental 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 problem with your air bag system, which could include your side and/or curtain air bags used for rollover protection (if equipped with rollover sensor).

### A

### 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 three to six seconds when the Start/Stop button is in the ON position.
- The light stays on after illuminating for approximately three to six seconds.
- The light comes on while the vehicle is in motion.
- The light blinks when the vehicle is running.

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

During a moderate to severe frontal collision, sensors will detect the vehicle's rapid deceleration. If the rate of deceleration is high enough, the control unit will inflate the front air bags, at the time and with the force needed.

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 by supporting the side upper body area.

- Air bags are activated (able to inflate if necessary) only when the START/STOP button is in the ON position.
- Air bags inflate in the event of certain frontal or side collisions to help protect the occupants from serious physical injury.
- There is no single speed at which the air bags will inflate. Generally, air bags are designed to inflate based upon the severity of a collision and its direction. 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 serious side collisions, vehicles equipped with a rollover sensor, side and/or curtain air bags will inflate if the sensing system detects a rollover.
  - When a rollover is detected, curtain air bags will remain inflated longer to help provide protection from ejection, especially when used in conjunction with the seat belts. (if equipped with a rollover sensor)
- 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 lifethreatening 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 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 in. (25 cm) of space to inflate. NHTSA recommends that drivers allow at least 10 in. (25 cm) between the center of the steering wheel and the chest.

### **MARNING**

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 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.



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



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's or the front passenger's forward motion, reducing the risk of head and chest injury.





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.



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 water and mild soap.
- 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)



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 panel which illuminates the words "PASSENGER AIR BAG OFF" indicating the front passenger air bag system is deactivated.
- The overhead console panel 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 smaller adults it may turn 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 overhead console 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 thick clothes 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

	Indicator/Warning light		Devices
Condition detected by the occupant classification system	"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.



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 place your feet on the front passenger seatback.



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



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



NEVER place your feet or legs on the dashboard.



 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 use car seat accessories such as thick blankets and cushions which cover up the car seat surface.



- 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.



 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 Start/Stop 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.



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 themselves in the seat. If the "PASSENGER AIR BAG OFF" indicator remains illuminated after the passenger repositions themselves 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 generally illuminates for approximately 4 seconds after the Start/Stop button is in the ON or START position. But, if the START/STOP button is pressed to the ON or START position within 3 minutes after the vehicle is turned OFF, the indicator does not illuminate. 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 System on 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.



NEVER use a rearward facing Child Restraint on a seat protected by an ACTIVE AIRBAG in front of it, DEATH or SERIOUS INJURY to the CHILD can occur.

# Why didn't my air bag go off in a 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 a collision energy absorption, and is not an indicator of whether or not an air bag should have inflated.

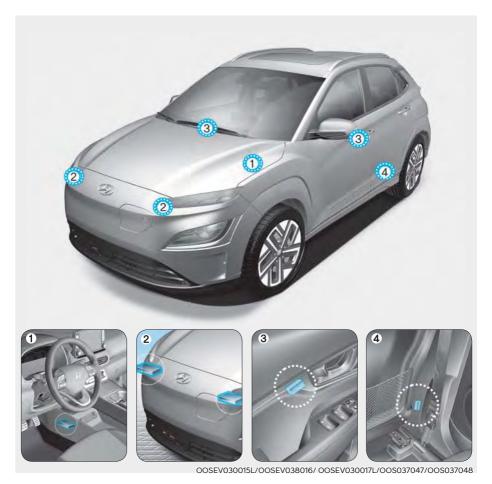
### Air bag collision sensors



### 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.
- Installing bumper guards with nongenuine Hyundai or non-equivalent parts may adversely affect the collision and airbag deployment performance.
- Press the Start/Stop button to the OFF or ACC position and wait for 3 minutes when the vehicle is being towed to prevent inadvertent air bag deployment.
- Have all air bag repairs performed by an authorized HYUNDAI dealer.



- 1. SRS control module
- 2. Front impact sensor (front door)
- 3. Side pressure sensor (front)\*
- 4. Side impact sensor (B-pillar)\*
- \*: if equipped

### Air bag inflation conditions



### Front air bags

Front air bags are designed to inflate in a frontal collision depending on the severity, speed or angles of impact of the front collision.





### 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, speed or angles of impact resulting from a side impact collision.

Although the driver's and front passenger's air bags are designed to inflate 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 in side impact collisions, but they may inflate in other collisions if the side impact sensors detect a sufficient impact.

Also, the side and curtain air bags are designed to inflate when a rollover is detected by a rollover sensor. (if equipped with rollover sensor)

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



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.



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.



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.

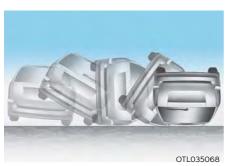
However, side and curtain air bags may inflate depending on the severity, vehicle speed and angles of impact.



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.



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 "under-ride" situation because deceleration forces that are detected by sensors may be significantly reduced by such "underride" collisions.



Front air bags may not inflate in rollover accidents because front air bag deployment would not provide additional occupant protection.

### *i* Information

With rollover sensor

The side and curtain air bags and the front center air bag may inflate in a rollover situation, when it is detected by the rollover sensor.



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 START/STOP button is in the ON position, or continuously remains on, have your vehicle immediately inspected by an authorized HYUNDAI dealer.

We recommend 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 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, and 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 START/ STOP 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

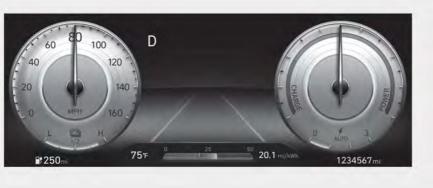


Air bag warning labels, required by the U.S. National Highway Traffic Safety Administration (NHTSA), are attached to alert the driver and passengers of potential risks of the air bag system. Be sure to read all of the information about the air bags that are installed on your vehicle in this Owners Manual.

# **4.Instrument Cluster**

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### **INSTRUMENT CLUSTER**



The actual cluster in the vehicle may differ from the illustration. For more details, refer to the "Gauges and Meters" in this chapter.

OOSEV042471N

- 1. Power/Charge gauge
- 2. Speedometer
- 3. Warning and indicator lights
- 4. LCD display (including Trip computer)
- 5. Battery SOC (State of Charge) gauge

# Instrument Cluster Control Instrument panel illumination



When the vehicle's position 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.

### A

### WARNING

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



OCN7040019L

- The brightness of the instrument panel illumination is displayed.
- If the brightness reaches the maximum or minimum level, an alarm will sound.

### **Gauges and Meters**

### Speedometer



The speedometer indicates the speed of the vehicle and is calibrated in miles per hour (MPH).

### Power/Charge gauge



The Power/Charge gauge shows the energy consumption rate of the vehicle and the charge/discharge status of the regenerative brakes.

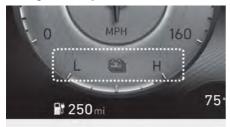
#### POWFR:

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.

#### · 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.

## State of Charge (SOC) gauge for high voltage battery



OOSEV042475N

The SOC gauge shows the charging status of the high voltage battery.

"L (Low)" position on the indicator indicates that there is not enough energy in the high voltage battery. "H (High)" position indicates that the driving battery is fully charged.

When driving on highways or motorways, make sure to check in advance if the driving battery is charged enough.

When there are 2 gauge bars (near the "L (Low)" area) on the SOC gauge, the warning light ( ) turns ON to alert you of the battery level.

When the warning light ( ) turns ON, the vehicle can drive an additional 12~18 miles (20~30 km) depending on the driving speed, heater/air conditioner, weather, driving style, and other factors. Charging is required.

### NOTICE

When there are 1-2 gauge bars left for the high voltage battery, the vehicle speed is limited and then eventually the vehicle will turn OFF. Charge the vehicle immediately.

### **Outside Temperature Gauge**



This gauge indicates the current outside air temperatures either in Celsius (°C) or Fahrenheit.

OOSEV041484N

 Temperature range: -40°F ~ 140°F (-40°C ~ 60°C)

The outside temperature on the display may not immediately change like a general thermometer not to distract the driver.

The temperature unit (from °C to °F or from °F to °C) can be changed by:

- User Settings mode in the Cluster:
   You can change the temperature unit
   in the "Units Temperature unit".
- Automatic climate control system:
   While pressing the OFF button, press
   the AUTO button for 3 seconds or
   more.

The temperature unit of the instrument cluster and climate control system will change at once.

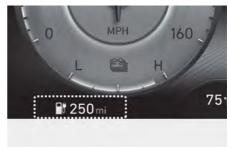
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#### **Odometer**



The odometer indicates the total distance that the vehicle has been driven and should be used to determine when periodic maintenance should be performed.

### Distance to empty



The distance to empty is the estimated distance the vehicle can be driven with remaining level of the high voltage battery.

For more details, refer to "Distance to Empty"in the Electric Vehicle Guide in front of the owner's manual.

### *i* Information

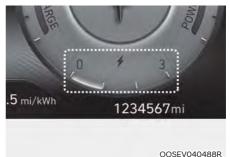
- If the vehicle is not on level ground or the battery power has been interrupted, the distance to empty function may not operate correctly.
- The distance to empty may differ from the actual driving distance as it is an estimate of the available driving distance.
- The distance to empty may vary significantly based on driving conditions, driving habits, heater/air conditioning use, and condition of the vehicle.

### Reduction gear shift indicator



This indicator displays which gear is selected.

### Regenerative braking level indicator



While using the regenerative brakes, you may select the regenerative braking level from 0 to 3 by pulling the paddle shifter. For more details, refer to "Regenerative Braking System" in chapter 6.

### **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 START/STOP 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 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 Indicator Light



This indicator light illuminates:

- When the power is limited for the safety of the electric vehicle.
   The power is limited for the following reasons.
  - The high voltage battery level is below a certain level or voltage is decreasing
  - The temperature of the motor or high voltage battery is too high or too low
  - There is a problem with the cooling system, or a failure that may interrupt normal driving

### NOTICE

- Do not accelerate or start the vehicle suddenly when the power down warning light is ON.
- When the power is limited for the safety of the high-powered parts of an electric vehicle, the power down indicator light illuminates. Your vehicle may not be driven, or may roll back on a slope with the indicator light ON due to the limitation of vehicle power.

### Charging Indicator Light



(red)

This warning light illuminates:

When charging the high voltage battery.

### High Voltage Battery Level Warning Light



This warning light illuminates:

- When the high voltage battery level is low.
- When the warning light turns ON, charge the battery immediately.

### Air Bag Warning Light



This warning light illuminates:

- When you turn the START/STOP button to 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 the 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 "Seat Belts" in chapter 3.

### Parking Brake & Brake Fluid Warning Light



This warning light illuminates:

- When you set the START/STOP button 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 the reservoir is low.
- When the regenerative brake does not operate.

If the brake fluid level in the reservoir is low:

- 1. Drive carefully to the nearest safe location and stop your vehicle.
- 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 9).
   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 dualdiagonal 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 are 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 the vehicle inspected by an authorized HYUNDAI dealer.

### 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.

### Anti-lock Brake System (ABS) Warning Light



This warning light illuminates:

- When the START/STOP 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 the 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 the 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.

Have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.



### 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 EPS Warning Light may illuminate and the steering effort may increase or decrease.

In this case, have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

## Electronic Parking Brake (EPB) warning light

### **EPB**

AUTO HOLD Indicator Light

AUTO HOLD

This warning light illuminates:

- When the START/STOP button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the FPB.

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). This indicator light illuminates:

- [White] When you activate the auto hold system by pressing the AUTO HOLD button.
- [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 6.

# Electric Power Steering (EPS) Warning Light

This warning light illuminates:

- When the START/STOP button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the Electric Power Steering System.

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

### Charging System Warning Light (for 12-volt 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.

### Master Warning Light



This indicator light illuminates:

- When there is a malfunction in the below systems.
  - Forward Collision-Avoidance Assist malfunction (if equipped)
  - Forward Collision-Avoidance Assist radar blocked (if equipped)
  - Blind-Spot Collision Warning malfunction (if equipped)
  - Blind-Spot Collision Warning radar blocked (if equipped)
  - LED headlight malfunction (if equipped)
  - High Beam Assist malfunction (if equipped)
  - Smart Cruise Control malfunction (if equipped)
  - Smart Cruise Control radar blocked (if equipped)
  - Tire Pressure Monitoring System (TPMS) malfunction

To identify the details of the warning, look at the LCD display.

### Low Tire Pressure Warning Light



This warning light illuminates:

- When the START/STOP 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 the underinflated tires are displayed on the LCD display).

For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 8.

This warning light remains on after blinking for approximately 60 seconds or repeatedly blinks on and off at approximately 3 second intervals:

When there is a malfunction with the TPMS.

In this case, have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 8.



### **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 Stability Control (ESC) Indicator Light (if equipped)



This indicator light illuminates:

- When the START/STOP 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 the 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 6.

## Electronic Stability Control (ESC) OFF Indicator Light



#### This indicator light illuminates:

- When the START/STOP 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 6.

### Immobilizer Indicator Light



### This indicator light illuminates for up to 30 seconds:

- When the vehicle detects the smart key in the vehicle with the START/ STOP button in the 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 START/STOP button is ON, but the vehicle cannot detect the smart key.
 In this case, have the 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 cannot start the vehicle. However, you can start the vehicle if you press the START/STOP button with the smart key. (For more details, refer to "Starting the vehicle" in chapter 6).
- When there is a malfunction with the immobilizer system.
  - In this case, have the vehicle inspected by an authorized HYUNDAI dealer.

### Turn Signal Indicator Light



This indicator light blinks:

- When you operate the turn signals.
   If any of the following occur, 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 any of these conditions occur, have your vehicle inspected by an authorized HYUNDAI dealer.

### Low Beam Indicator Light



This indicator light illuminates:

· When the headlights are on.

### 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.

### High Beam Assist indicator light (if equipped)



This warning light illuminates:

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

- White: When High Beam Assist is ready to operate.
- Green: When High Beam Assist is operating.

If your vehicle detects oncoming or preceding vehicles, High Beam Assist will switch the high beam to low beam automatically.

For more details, refer to "High Beam Assist (HBA)" in this chapter 5.

### Light ON Indicator Light



This indicator light illuminates:

 When the tail lights or headlights are on.

# LED Headlight Warning Light (if equipped)



This warning light illuminates:

- When the START/STOP 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.

## Cruise Indicator Light (if equipped)

CRUISE

ECO Mode Indicator Light (if equipped)

ECO

This indicator light illuminates:

When the cruise control system is enabled.

For more details, refer to "Cruise Control (CC)" in chapter 7.

### SPORT Mode Indicator Light

SPORT

This indicator light illuminates:

• When you select "SPORT" mode as drive mode.

For more details, refer to "Drive Mode Integrated Control System" in chapter 6.

This indicator light illuminates:

When you select "ECO" mode as drive mode.

For more details, refer to "Drive Mode Integrated Control System" in chapter 6.

## ECO+ Mode Indicator (if equipped)

ECO+

This indicator light illuminates:

 When you select "ECO+" mode as drive mode.

For more details, refer to "Drive Mode Integrated Control System" in chapter 6.

## Forward Safety warning light (if equipped)



This indicator light illuminates:

- When the START/STOP button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with Forward Collision-Avoidance Assist.

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

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

### Lane Safety indicator light (if equipped)



This indicator light illuminates:

- [Green] When Lane Keeping Assist operating conditions are satisfied.
- [White] When Lane Keeping Assist operating conditions are not satisfied.
- [Yellow] When there is a malfunction with Lane Keeping Assist.

In this case, have your vehicle inspected by an authorized HYUNDAI dealer.

For more details, refer to "Lane Keeping Assist (LKA)" in chapter 7.

# 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.

### i

### 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.

### **LCD DISPLAY MESSAGES**

#### Shift to P

This warning message is displayed if you try to turn off the vehicle when the gear is not in the P (Park) position.

At this time, the START/STOP button changes to the ACC position (If you press the START/STOP 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 START/STOP button to the OFF position.

# Press START/STOP button while turning wheel

This warning message is displayed if the steering wheel does not unlock normally when the START/STOP button is pressed.

You should press the START/STOP 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 START/STOP button changes to the OFF position.

### Press brake pedal to start vehicle

This warning message is displayed if the START/STOP 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 START/STOP 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 START/STOP button.

### Press START/STOP button again

This message is displayed if you were unable to start the vehicle when the START/STOP button was pressed.

If this occurs, attempt to start the vehicle by pressing the START/STOP button again.

If the warning message appears each time you press the START/STOP button, have your vehicle inspected by an authorized Hyundai dealer.

### Press START/STOP button with key

This warning message is displayed if you press the START/STOP 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 START/ STOP 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.

### Low washer fluid (if equipped)

This warning message is displayed if the washer fluid level in the reservoir is nearly empty.

Have the washer fluid reservoir refilled.

### 12V battery discharging due to additional electrical devices

This warning message is displayed if the 12V battery discharge is detected due to use of unauthorized electrical/electronic devices. Some vehicle functions will not be able to use and the 12V battery may discharge. If the message continues to appear even though the external electrical/electronic device is removed, have your vehicle inspected by an authorized HYUNDAI dealer.

### Door, Hood, Liftgate open



This warning is displayed indicating which door, or hood, or 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 (if equipped)



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

### Lights mode



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

### Wiper mode



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

### Low Pressure (if equipped)



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 8.

#### Turn on FUSE SWITCH



This warning message is displayed if the fuse switch located on the fuse box under the steering wheel is OFF.

You should turn the fuse switch on.

For more details, refer to "Fuses" in chapter 9.

### Heated Steering Wheel turned off (if equipped)

This message is displayed if you turn off the heated steering wheel.

For more details, refer to "Heated Steering Wheel" in chapter 5.

### Check headlight (if equipped)

This warning message is displayed if the headlights are not operating properly. A headlight bulb may need to be replaced.

### *i* Information

Make sure to replace the burned out bulb with a new one of the same wattage rating.

### Check High Beam Assist (HBA) system (if equipped)

This warning message is displayed if there is a problem with High Beam Assist. Have the vehicle inspected by an authorized HYUNDAI dealer.

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

### Check Forward Safety system (if equipped)

This warning message is displayed if there is a malfunction with 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 7.

# Check Driver Attention Warning (DAW) 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 information, refer to "Driver Attention Warning (DAW)" in chapter 7.

# Check Lane Keeping Assist (LKA) system (if equipped)

This warning message is displayed if there is a problem with Lane Keeping Assist. Have the vehicle inspected by an authorized HYUNDAI dealer.

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

# Shift to P to charge/Shift to P to start charging



This message is displayed if you connect the charging cable without the gear in the P (Park) position.

Shift to P (Park) before connecting the charging cable.

### Remaining time



This message is displayed to notify the remaining time to charge the battery to the selected target battery charge level.

### Unplug vehicle to start



This message is displayed when you start the vehicle without unplugging the charging cable. Unplug the charging cable, and then turn on the vehicle.

### Charging door open



This message is displayed when the vehicle is driven with the charging door opened. Close the charging door and then start driving.

# Charging Stopped. Check the AC/DC charger/Charging stopped. Please check the AC/DC charger

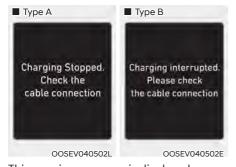


- This warning message is displayed when charging is stopped for the reasons below:
  - There is a problem with the external AC charger or DC charger charger
  - The external AC charger stopped charging
  - The charging cable is damaged

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

If the same problem occurs when charging the vehicle with a normally operating AC charger or genuine HYUNDAI portable charger, have your vehicle inspected by an authorized HYUNDAI dealer.

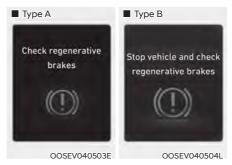
# Charging Stopped. Check the cable connection/Charging interrupted. Please check the cable connection



This warning message is displayed when charging is stopped because the charging connector is not correctly connected to the charging inlet. In this case, separate the charging connector and re-connect it and check whether there is any problem (external damage, foreign substances, etc.) with the charging connector and charging

If the same problem occurs when charging the vehicle with a replaced charging cable or genuine HYUNDAI portable charger, have your vehicle inspected by an authorized HYUNDAI dealer.

### Check regenerative brakes / Stop vehicle and check regenerative brakes



These warning messages are displayed when the regenerative brake system does not work properly.

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

### Low EV battery



When the high voltage battery level reaches below approximately 8%, this warning message is displayed.

The warning light on the instrument cluster ( ) will turn ON simultaneously.

Charge the high voltage battery immediately.

inlet.

### Charge immediately. Power limited

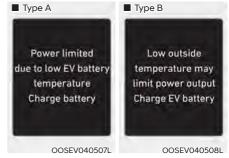


When the high voltage battery level reaches below approximately 5%, this warning message is displayed.

The warning light on the instrument cluster () and the power down warning light () will turn on simultaneously.

The vehicle's power will be reduced to minimize the energy consumption of the high voltage battery. Charge the battery immediately.

Power limited due to low EV battery temperature. Charge battery/Low outside temperature may limit power output. Charge EV battery



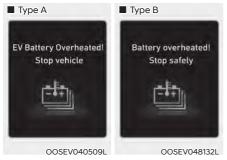
Both warning messages are displayed to protect electric vehicle system when outside temperature is low. If the high voltage battery charging level is low and parked outside in low temperature for a long time, vehicle power could be limited.

Charging the battery before driving helps increase power.

### NOTICE

If these warning messages are still displayed even after the ambient temperature has increased, have the vehicle inspected by an authorized HYUNDAI dealer.

### EV Battery Overheated! Stop vehicle/Battery overheated! Stop safely



This warning message is displayed to protect battery and electric vehicle system when the high voltage battery temperature is too high.

Turn off the START/STOP button and stop the vehicle so that the battery temperature decreases.

#### Power limited



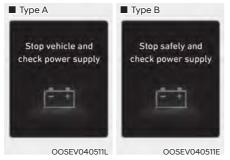
This warning message is displayed:

- When the high voltage battery is below a certain level, or voltage is decreasing.
- When the temperature of the motor or high voltage battery is too high very high.
- When there is a problem with the cooling system or a failure that may interrupt normal driving.

### NOTICE

- When this warning message is displayed, do not accelerate or start the vehicle suddenly.
- When the power is limited for the safety of the high-powered parts of an electric vehicle, the warning message is displayed. Your vehicle may not be driven, or may roll back on a slope with the warning message displayed due to the limitation of vehicle power.

# Stop vehicle and check power supply/Stop safely and check power supply



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

In this case, park the vehicle in a safe location and tow your vehicle to the nearest authorized HYUNDAI dealer and have the vehicle inspected.

### Check Active Air Flap System

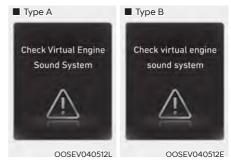


This warning message is displayed in the following situations:

- There is a malfunction with the actuator flap
- There is a malfunction with the actuator air flap controller
- The air flap does not open

When all of the above conditions are fixed, the warning will disappear.

### Check virtual engine sound system



This message is displayed when there is a problem with the Virtual Engine Sound System (VESS).

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

### Check electric vehicle system



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

Refrain from driving when the warning message is displayed.

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

### **LCD DISPLAY**

### **LCD Display Control**



The LCD display modes can be changed by using the control buttons.

Switch	Function		
ョ	MODE button for changing modes		
$\wedge$ , $\vee$	MOVE switch for changing items		
OK	SELECT/RESET button for setting or resetting the selected item		

### **View Modes**

View modes	Symbol	Explanation
Driving Assist		This mode displays the state of:  - Lane Keeping Assist, Smart Cruise Control, Highway Driving Assist  - Intelligent Speed Limit Warning  For more information, refer to "Lane Keeping Assist (LKA)", "Intelligent Speed Limit Warning (ISLW)", "Driver Attention Warning (DAW)", "Smart Cruise Control (SCC)", "Highway Driving Assist (HDA)" in chapter 7.
Trip Computer		This mode displays driving information such as the tripmeter, electric energy economy, etc.  For more details, refer to "Trip Computer" in this chapter.
Turn By Turn (TBT)	r	This mode displays the state of the navigation.
User Settings (if equipped)	<b>\$</b>	In this mode, you can change settings of the doors, lamps, etc.
Warning	<u> </u>	This mode displays warning messages related to the broken lamps, etc. This mode displays information related to the tire pressure (TPMS), the state of driving force distribution and the amount of remaining urea solution.

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

### Trip computer mode



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

For more information, refer to "Trip Computer" in this chapter.

### Turn By Turn (TBT) mode



Turn-by-turn navigation, distance/time to destination information is displayed when Turn by Turn view is selected.

### **Driving Assist mode**



#### LKA/ISLW/DAW/SCC

This mode displays the state of Lane Keeping Assist, Intelligent Speed Limit Warning, Driver Attention Warning and Smart Cruise Control.

For more details, refer to each function information in chapter 7.



**Driver Attention Warning** 

This mode displays the state of Driver Attention Warning.

For more details, refer to "Driver Attention Warning (DAW)" in chapter 7.

### Master warning group



This warning light informs the driver the following situations.

- Forward Collision-Avoidance Assist malfunction (if equipped)
- Forward Collision-Avoidance Assist radar blocked (if equipped)
- Blind-Spot Collision-Avoidance Assist malfunction (if equipped)
- Blind-Spot Collision-Avoidance Assist radar blocked (if equipped)
- LED headlight malfunction (if equipped)
- High Beam Assist malfunction (if equipped)
- Smart Cruise Control malfunction (if equipped)
- Smart Cruise Control radar blocked (if equipped)
- Tire Pressure Monitoring System (TPMS) malfunction

The Master Warning Light illuminates if one or more of the above warning situations occur.

At this time, a Master Warning icon ( $\Lambda$ ) will appear on the LCD display.

If the warning situation is solved, the master warning light will be turned off and the Master Warning icon will disappear.



**Tire Pressure** 

This mode displays information related to Tire Pressure.

For more details, refer to "Tire Pressure Monitoring System (TPMS)" in chapter

### **User Settings Mode (if equipped)**



In this mode, you can change the settings of the instrument cluster, doors, lamps, etc.

- 1. Driver Assistance
- 2. FCO vehicle
- 3. Head-Up Display
- 4. Cluster
- 5. Lights
- 6. Door
- 7. Convenience
- 8. Units
- 9. Language

10.Reset

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

#### Shift to P to edit settings

This warning message illuminates if you try to select an item from the User Settings mode while driving.

 For your safety, change the User Settings after parking the vehicle, applying the parking brake and selecting the shifting to P(Park).

### Quick guide (Help)

This mode provides quick guides for the systems in the User Settings mode.

Select an item, press and hold the OK button.

For more details about each system, refer to this Owner's Manual.



### Information

When the infotainment system is applied, only the User's Setting mode on the infotainment system is supported but the User's Setting mode on the instrument cluster is not supported.

### 1. Driver Assistance

Items	Explanation
SCC Reaction	To adjust the sensitivity of Smart Cruise Control. • Fast/Normal/Slow
Reaction	For more details, refer to "Smart Cruise Control (SCC)" in chapter 7.
	Highway Driving Assist
Driving	To activate or deactivate Highway Driving Assist. For more details, refer to "Highway Driving Assist (HDA)" in chapter 7.
Driving Convenience	Auto Highway Speed Control
	To activate or deactivate Navigation-based Smart Cruise Control For more details, refer to "Navigation-based Smart Cruise Control (NSCC)" in chapter 7.
Warning Timing	To adjust the warning timing of the driver assistance system.  • Normal / Late
Warning Volume	To adjust the warning volume of the driver assistance system.  • High / Medium / Low
Driver	Leading Vehicle Departure Alert
Attention	Inattentive Driving Warning
Warning	To alert the driver's inattentive driving.  For more details, refer to "Driver Attention Warning (DAW)" in chapter 7.
Forward	To adjust Forward Collision-Avoidance Assist  • Active Assist/Warning Only/Off
Safety	For more details, refer to "Forward Collision-Avoidance Assist (FCA)" in chapter 7.
Lane Safety	To adjust Lane Keeping Assist function. • Assist/Warning Only/Off For more details, refer to "Lane Keeping Assist (LKA)" in chapter 7.

Items	Explanation
	Safe Exit Warning
Dlind snot	To activate or deactivate the Safe Exit Warning For more details, refer to "Safe Exit Warning (SEW)" in chapter 7.
Blind-spot Safety	Active Assist/Warning Only/Off
,	To activate or deactivate Blind-Spot Collision-Avoidance Assist For more details, refer to the "Blind-Spot Collision-Avoidance Assist (BCA)" in chapter 7.
	Parking Distance Warning Auto On
Do whi in w	To activate or deactivate the Parking Distance Warning Auto On.  For more details, refer to "Forward/Reverse Parking Distance Warning (PDW)" in chapter 7.
Parking Safety	Rear Cross-Traffic Safety
	To activate or deactivate Rear Cross-Traffic Collision Warning or Rear Cross-Traffic Collision-Avoidance Assist.  For more details, refer to "Rear Cross-Traffic Collision Warning (RCCW)" or "Rear Cross-Traffic Collision-Avoidance Assist (RCCA)" in chapter 7.

### 2. ECO vehicle

Items	Explanation
	To activate or deactivate the Utility Mode.
Utility Mode	* Utility Mode: This is a mode for using electricity from high voltage battery. (not possible to drive) It's useful while camping, etc.
Smart recuperation	To activate or deactivate the Smart Recuperation function. When activated, the recuperation level is adjusted automatically according to the current driving situation.
·	For more details, refer to "Smart Recuperation System" in chapter 6.

### 3. Head-Up Display (if equipped)

Items	Explanation
Enable Head-up display	If this item is checked, Head-Up Display will be activated.
Display Height	To adjust the height of the image displayed.
Rotation	To adjust the angle of the image displayed.
Brightness	To adjust the brightness of the image displayed.
Content Selection	To select the content to be displayed.

### 4. Cluster

Items	Explanation
Reset electric energy economy	<ul> <li>At vehicle start</li> <li>After recharging</li> <li>Manually</li> <li>To reset the electric energy economy displayed.</li> </ul>
Wiper/Lights Display	To activate or deactivate the Wiper/ Light mode. When activated, the LCD display shows the selected Wiper/Light mode whenever you changed the mode.
Traffic Signs	To set the traffic signs displayed.
Icy Road Warning	To activate or deactivate the icy road warning.
Cluster Voice Guidance Volume	To adjust the cluster voice guidance volume. • Level 0 ~ 3
Welcome Sound	To activate or deactivate the welcome sound.
Theme Selection	You can select the theme of the cluster. Link to Drive Mode / Classic A / Classic B / Classic C / CUBE

### 5. Lights

Items	Explanation
Illumination	To adjust the illumination level. • Level 1~20
	Off : The one touch turn signal function will be deactivated.
One Touch Turn Signal	• 3, 5, 7 Flashes: The turn signal indicator will blink 3, 5, or 7 times when the turn signal lever is moved slightly.
	For more details, refer to "Lighting" in chapter 5.
Headlight Delay	To activate or deactivate the headlight delay function. For more details, refer to "Lighting" in chapter 5.
High Beam Assist	To activate or deactivate High Beam Assist.  For more details, refer to "High Beam Assist (HBA)" in chapter 5.

### 6. Door

	Items	Explanation
		Disable: The auto door lock operation will be canceled.
Auto lo	uto lock	• Enable on speed: All doors will be automatically locked when the vehicle speed exceeds 9.3 mph (15 km/h).
	Autolock	• Enable on shift: All doors will be automatically locked if the vehicle is shifted from the P (Park) position to the R (Reverse), N (Neutral), or D (Drive) position (Only when the vehicle is in the ready mode).
		Disable: The auto door unlock operation will be canceled.
Au	Auto unlock	Vehicle Off: All doors will be automatically unlocked when the START/ STOP button is set to the OFF position.
		• On shift to P: All doors will be automatically unlocked if the gear is shifted to the P (Park) position (Only when the vehicle is in the ready mode).
Tu	Two press unlock	Off: The two press unlock function will be deactivated. Therefore, all doors will unlock if the door unlock button is pressed.
		On: Only the driver's door will unlock if the door unlock button is pressed. When the door unlock button is pressed again within 4 seconds, the remaining doors will unlock.
fe	Horn eedback	To activate or deactivate the horn feedback. If the horn feedback is activated, after locking the door by pressing the lock button on the smart key, and pressing it again within 4 seconds, the horn feedback sound will operate once to indicate that all doors are locked (if equipped with smart key).

### 7. Convenience

Items	Explanation
Rear Occupant Alert	To activate or deactivate the Rear Occupant Alert.  For more details, refer to "Rear Occupant Alert (ROA) system" in chapter  5.
Welcome Mirror/Light	To activate or deactivate the welcome mirror/light function. When activated, the outside rearview mirrors are unfolded if approached with the smart key. For more details, refer to "Welcome System" in chapter 5."
Wireless Charging System	To activate or deactivate the wireless charging system in the front seat.  For more details, refer to "Wireless cellular phone charging system" in chapter 5.
Auto Rear Wiper (in R)	To activate or deactivate the rear wiper while the vehicle is in reverse with the front wiper ON.
Service Interval	Service Interval     To activate or deactivate the service interval function.     Adjust Interval     If the service interval menu is activated, you may adjust the time and distance.     Reset     To reset the service interval.

### 8. Units

Items	Explanation
Speed Unit (if equipped)	To select the speed unit. (km/h, MPH)
Temperature Unit	To select the temperature unit. (°C,°F)
Electric energy Economy Unit	To select the electric energy economy unit. (km/kWh, kWh/100km, MPG)
Tire Pressure Unit	To select the tire pressure unit. (psi, kPa, bar)

### 9. Language

Items	Explanation
Language	To select language.

#### 10.Reset

Items	Explanation
Reset	You can reset the menus in the User Settings mode. All menus in the User Settings mode are reset to factory settings, except language and service interval.

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

### **TRIP COMPUTER**

The trip computer is a microcomputercontrolled driver information system that displays information related to driving.



Some driving information stored in the trip computer resets if the battery is disconnected.

### Trip modes

### Drive Info

- Trip distance
- Average energy consumption
- · Total driving time



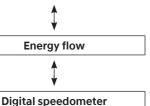
#### After recharging

- Trip distance
- · Average energy consumption
- Total driving time



#### Accumulated Info

- Trip distance
- · Average energy consumption
- · Total driving time





To change the trip mode, toggle the "\,, \righty" switch on the steering wheel.

### **Drive Info**



This display shows the trip distance (1), the average energy consumption (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 manually reset the information, press and hold the OK button when viewing the Drive Info. The trip distance, the average energy consumption, 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.)

### *i* Information

The vehicle must be driven for a minimum of 300 meters (0.19 miles) since the last ignition key cycle before the driving information is recalculated.

### After Recharging



Trip distance (1), average energy consumption (2), and total driving time (3) after the vehicle has been rrecharged are displayed.

To reset manually, press the OK button on the steering wheel for more than 1 second when 'After recharging' is displayed.

#### Accumulated info



This display shows the accumulated trip distance (1), the average energy consumption (2), and the total driving time (3).

The information is accumulated starting from the last reset.

To manually reset the information, press and hold the OK button when viewing the Accumulated driving info. The trip distance, the average energy consumption, and total driving time will reset simultaneously.

The accumulated 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).

### *i* Information

The vehicle must be driven for a minimum of 0.19 miles since the last ignition key cycle before the accumulated driving information is recalculated.

### Energy flow



The electric vehicle system informs the drivers its energy flow in various operating modes. While driving, the current energy flow is specified in three modes.

For more details, refer to "Energy Flow" in the Electric Vehicle Guide provided in front of the owner's manual.

### Digital speedometer



This digital speedometer display shows the speed of the vehicle (MPH).

## **5. Convenient Features**

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### **ACCESSING YOUR VEHICLE**

### **Smart Key**



Your HYUNDAI uses a Smart Key, which you can use to lock or unlock doors (and liftgate) and start the vehicle.

- 1. Door Lock
- 2. Door Unlock
- 3. Liftgate Unlock
- 4. Panic

### Locking your vehicle (Button type)



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

- 1. Close all doors, hood and liftgate.
- 2. Either press the door handle button or press the Door Lock button (1) on the smart key.
- 3. The hazard warning lights will blink and the chime will sound once.
- When the doors are locked, the indicator light on the central door lock/unlock switch will be illuminated.

### 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 Start/Stop button is in ACC or ON position.
- Any of the doors are open except for the liftgate.

## Locking your vehicle (Touch sensor type)



- 1. Close all of the doors, the hood and the liftgate.
- Make sure you have the smart key in your possession and touch either the touch sensor on the door handle (the engraved part) or press the Door Lock button (1) on the smart key within 1 second.
- 3. The doors, hood and trunk are locked.

The chime will sound once and the hazard warning lights will blink.

- 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.
- Make sure the doors are locked by pulling the door handle.
- If you locked the door with the touch sensor on the door handle, the doors cannot be unlocked with the sensor within 3 seconds.

Even though you press the outside door handle button, the doors will not lock and the chime will sound for three seconds if any of the following occur:

- · The Smart Key is in the vehicle.
- The Start/Stop button is in ACC or ON position.
- Any door except the liftgate is open.



### **CAUTION**

When you leave your vehicle with the smart key, make sure to press the button on the front door handle or touch the touch sensor on the front door handle to lock the doors after close all of the doors, the hood and the liftgate. If you do not press the button or touch the touch sensor firmly, the doors might not be locked so please use caution.



### **WARNING**

Do not leave the Smart Key in your vehicle with unsupervised children. Unattended children could press the Start/ Stop 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 (Button type)



To unlock your vehicle:

- 1. Make sure you have the smart key in your possession.
- 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.
- 3. 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 menu in the LCD cluster 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.

Select or Deselect the Two Press Unlock Feature in the User Settings menu in the LCD cluster display. The option can be found under the following menu:

USER SETTINGS → DOOR → 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.

### *i* 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

### Unlocking your vehicle (Touch sensor type, When the Two Press Unlock feature is off)



To unlock your vehicle using the door handle touch sensor or the Smart Key:

- 1. Make sure you have the smart key in your possession.
- Put your hand in the door handle or press the Door Unlock button (2) on the smart key. All doors will unlock and the hazard warning lights will blink two times.
- After unlocking the doors, the doors will automatically re-lock after 30 seconds unless a door is opened.

### Unlocking your vehicle (Touch sensor type, When the Two Press Unlock feature is on)

To unlock your vehicle using the door handle touch sensor or the Smart Key:

- 1. Make sure you have the smart key in your possession.
- 2. Put your hand in the door handle or press the Door Unlock button (2) on the smart key.
- 3. The driver's door will unlock.
- 4. If you touch the door unlock sensor inside of the front door handle to unlock the doors within 4 seconds, all of the doors will unlock. When the doors unlock, the hazard warning lights will blink two times and the chime will sound.
- 5. After unlocking the doors, the doors will automatically re-lock after 30 seconds unless a door is opened.

#### 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 menu in the LCD cluster 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.

Select or Deselect the Two Press Unlock Feature in the User Settings menu in the LCD cluster display. The option can be found under the following menu:

### USER SETTINGS → DOOR →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.

### *i* Information

- The door handle sensor 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 sensor when the smart key is within this range
- If you unlocked the door with the door handle, the doors cannot be locked with the sensor within 2 seconds.

### Remotely starting vehicle

You can start the vehicle using the Remote Start button on the smart key.

To start the vehicle remotely:

- Press the door lock button on the smart key within 32 feet (10 m) from the vehicle.
- 2. Press the Remote Start button for more than 2 seconds within 4 seconds after pressing the door lock button.
- 3. The hazard warning lights will blink and the vehicle will start.
- 4. To turn off the remote start function, press the Remote Start button once.

### *i* Information

- The vehicle must be in P (Park) for the remote start function to start.
- The vehicle turns off if you get on the vehicle without a registered smart key.
- The vehicle turns off if you do not get on the vehicle within 10 minutes after remotely starting the vehicle.
- The Remote Start button may not operate if the smart key is not within 32 feet (10 m).
- The vehicle will not remotely start if the motor hood or liftgate is opened.
- Do not idle the vehicle for a long period.

#### 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 detailed information refer to the START/STOP button in chapter 5.

### NOTICE

To prevent damaging the smart key:

- Keep the smart key away from water or any liquid and fire. If the inside of the smart key gets damp (due to drinks or moisture), or is heated, internal circuit may malfunction and may void the vehicle warranty.
- Avoid dropping or throwing the smart key.
- Protect the smart key from extreme temperatures.

### Remotely starting vehicle

You can start the vehicle using the Remote Start button on the smart key.

To start the vehicle remotely:

- Press the door lock button on the smart key within 10 m (32 feet) from the vehicle.
- 2. Press the Remote Start button for more than 2 seconds within 4 seconds after pressing the door lock button.
- 3. The hazard warning lights will blink and the vehicle will start.
- 4. To turn off the remote start function, press the Remote Start button once.

### *i* Information

- The vehicle must be in P (Park) for the remote start function to start.
- The motor turns off if you get on the vehicle without a registered smart key.
- The motor turns off if you do not get on the vehicle within 10 minutes after remotely starting the vehicle.
- The Remote Start button may not operate if the smart key is not within 10 m (32 feet).
- The vehicle will not remotely start if the hood or liftgate is opened.
- Do not idle the vehicle for a long period.

### Mechanical key

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



Move the release lever in the direction of the arrow (1) and then remove the mechanical key (2). Insert the mechanical key into the key hole on the door.

To reinstall the mechanical key, put the key into the hole and push it 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, it is recommended that you should immediately take the vehicle and remaining key to your authorized HYUNDAI dealer or tow the vehicle, if necessary.

### Smart key precautions

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

- The smart key is close to a radio transmitter such as 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 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, it is recommended that you 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.

Avoid placing the smart key and your mobile phone in the same location and always try to maintain an adequate distance between the two devices.

### *i* Information

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If the keyless entry system is inoperative due to changes or modifications not expressly approved by the party responsible for compliance, it will not be covered by your manufacturer's vehicle warranty.

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

### 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.

### Battery replacement



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.
- 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, it is recommended that you contact an authorized HYUNDAI dealer.

### A

### 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.

### *i* 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 vehicle is disabled.

When the START/STOP 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 START/STOP button to the LOCK/OFF position, then place the START/STOP button to the ON position again.

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

If the system repeatedly does not recognize the coding of the key, 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.

## A

### 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

## Hyundai Digital Key (if equipped)

### **Digital Key Application**

To use Hyundai Digital Key mobile app, you should install Hyundai digital key application. Search 'Hyundai digital key' in the Google Play Store and download the app. Please refer to the detailed manual of the digital key app. The option can be found under the following app menu:

#### Menu → Application Info → Tutorial

Please note the manual before using the app.

\* This service is only available for Android smartphones. Please confirm supported/compatible devices on our website.

### **MARNING**

#### For used vehicle

If any of the digital key (smartphone key or card key) is already registered when you press ON button after unlocking the doors, the message 'Digital key(s) active' appears on the instrument cluster once. If you buy a used vehicle, you should confirm the message and delete the registered smartphone key and card key. In addition, please notify the Hyundai Customer Care Center.

If the card key does not work properly, please delete the card key and register the smartphone key and re-register the card key.

#### For vehicle maintenance

If you need to have your Digital Key System repaired or replaced please ensure your Smartphone Key is still active. You may have to pair your phone again.

In the case, re-initialize your Digital Keys using the Hyundai Digital Key mobile app.

### Digital key (smartphone) NFC function

You can use the Digital Key NFC (Near Field Communication) function after turn your smartphone NFC settings on. And you should unlock & turn on smartphone screen to use it.

\* To change the NFC mode of the smartphone, please refer to the smartphone manual or contact to the customer service center of smartphone manufacturers.

### Digital key (smartphone)

Hyundai Digital Key (Smartphone) Pairing

- Turn the vehicle on with the Smart key and make sure to keep the smart key inside the vehicle during digital key registration.
- 2. Register your Digital key from the vehicle user setting menu as follows.
- With Navigation screen:
   From the infotainment screen menu,
   go to [Setup] [Vehicle] [Digital Key]
   [Smart Phone Key] then select the
   [Save] from submenu.
- Without navigation screen:
   From cluster menu, go to [Digital Key]
   [Smart Phone Key] and select [Save].

### *i* Information

The [Save] button will be disabled if the digital key (Smartphone key) is already saved.

Please refer to "Digital Key Delete" in this manual and follow the digital key delete procedure in your car before Digital key save.

Please refer to the 'Tutorial' on your Digital key app and delete the previous saved key in your smartphone before save.

- 3. Select the vehicle to save on your Digital key application and activate the save mode.
- \* Save mode is available only on the vehicle owner's Digital key application.
- Place the backside of smartphone onto the wireless charging pad(invehicle authentication pad).
   The saving process will begin automatically.
- 5. Once the digital key save is complete, a message will be shown on the infotainment screen or cluster.
- 6. Remove the smartphone from the pad and complete the saving process.



[A]: Indicator light

[B]: Wireless Charging Pad
(In-vehicle Authentication Pad)

#### Hyundai Digital Key (Smartphone Key) Deletion

- Turn the vehicle on with the Smart key and make sure to keep the smart key inside the vehicle during delete process.
- 2. Delete your Digital key from the vehicle user setting menu as follows.
- With Navigation screen:
   From the infotainment screen menu,
   go to [Setup] [Vehicle] [Digital Key]
   [Smart Phone Key] then select the
   [Delete] from submenu.
- \* Without navigation screen: From cluster menu, go to [Digital Key] - [Smart Phone Key] and select [Delete].

### *i* Information

The [Delete] button will be disabled if there is no digital key (Smartphone key) saved.

- Once the digital key delete is complete, a message will be shown on the infotainment screen or cluster.
- Go to [Initialize Digital Key] menu on the digital key application and select the vehicle to delete the digital key information.
- Open the Hyundai Digital Key app → Menu → Initialize Digital Key
- # If the saved digital key information in your car is deleted due to vehicle maintenance, the digital key in your smartphone should be deleted as well.
- \* For more information, please refer to the 'Tutorial' on your Digital key app.

### **CAUTION**

- If the smartphone is removed from the interior authentication pad during enrollment, the saving process will be cancelled.
- If the infotainment or instrument cluster screen is changed during enrollment, the saving process will be cancelled.
- If the vehicle is turned off during enrollment, the saving process will be cancelled.
- If the gear is shifted, the saving process will be cancelled.
- If you try to save the smartphone which is not logged in with the vehicle owner's ID or if you try to save the Card key, the saving process will not begin.
- If the NFC setting on your smartphone is off, the saving process will not begin.
- If the smartphone screen is changed to off or locked status, the saving process will be cancelled.
- If there is no Smart key during the save process, the saving process will not begin.

#### Set up main vehicle

You can manage multiple digital keys from the Digital key app. From the list of digital keys you own, select the vehicle you want to make your priority vehicle.

For more information, please refer to the 'Tutorial' on your Digital key app.



[1]: Door handle authentication pad

#### NFC door lock/unlock

You should contact your smartphone's NFC antenna(backside of phone) to door handle authentication pad (1) marked position near by the lock button) of driver's (or front passenger's) outside door for 2 seconds to lock or unlock the doors. If the Two Press Unlock feature is applied (press twice for unlocking), driver's seat door will be unlocked by contacting the digital key (smartphone key). In this state, if you contact one more time within 4 seconds, all the doors unlock. Please make sure the doors are locked. If you do not open any of the doors after unlocking, it automatically re-lock after 30 seconds.

Note that you cannot lock your vehicle when you contact NFC antenna in the smartphone to the door handle pad if any of the following occurs:

- The Proximity / Smart Key is in the vehicle.
- The Start/Stop button is in ACC or ON position.
- Any of the doors, hood and trunk is opened.

If the smartphone digital key does not work, please remove the smartphone more than 4 inches (0.1 m) from the door handle authentication pad and try it again.

After unlock the door or start up the vehicle with digital key, even though the driver tries to lock the doors by the central door lock switch, the door lock will be once locked and immediately released at the moment of door closed.

### Start-up with Digital Key

- After placing your registered smartphone onto the interior authentication pad (wireless charger), step on the brake and press the Start/ Stop button.
- 2. After start-up, the digital key data will be automatically updated. It takes 5 to 20 seconds, after that, the smartphone can be go into the wireless charging mode automatically. Once the vehicle started, you can remove the smartphone from the pad.



[A]: Indicator light

[B]: Wireless Charging Pad (In-vehicle Authentication Pad)

### *i* Information

After reconnecting the vehicle battery power supply or charging the battery, it may take time to operate due to remote renewal of security information. When you lock or unlock the door with NFC, please contact and hold your smartphone on the door handle until it works.

The solution allows for offline mode usage when the mobile data connection of the smartphone is weak. When you are in the place where the mobile data connection of your smartphone is available and place your smartphone on the interior authentication pad (wireless charger) and start up your vehicle or contact the digital key on the door handle to lock or unlock the door, the remote renewal of security information starts automatically. Even though the vehicle is turned on, please wait until the remote renewal process is completed and wireless charger is converted to charging mode.

### **CAUTION**

The vehicle can be turned on if the registered smartphone or card key is placed on the interior authentication pad (wireless charger). Do not leave unsupervised children or people who are not aware of the system since it can result in serious injury or death. Always have the registered digital key (smartphone) or card key with you to prevent vehicle theft when leaving the vehicle.

For more information, refer to the vehicle Start/Stop button in chapter 6.

#### Remote Control with Digital Key

To use the remote control function with your android smartphone, Bluetooth must be turned on.

### Remote Control Connection with Digital Key

- Open Hyundai digital key application on the smartphone. Select the vehicle to activate the remote control function as a main vehicle.
- Approach with the activated smartphone app to your vehicle and you can check whether the connection is available. If it enables your smartphone to connect, connect with your vehicle by pressing the connect button. The remote control function is activated after completing the process.

### Remote Control Operation with Digital Key

You can execute the remote control operation including door lock/unlock, panic on/off, remote start / remote stop and trunk opening. The icon for each function will be highlighted and alarm/vibration also provided when the operation is performed.

Note that you cannot lock your vehicle using the Hyundai digital key app if any of the following occurs:

- The Start/Stop button is in ACC or ON position.
- Any doors are open.

When the smartphone and the vehicle are connected by the Bluetooth function but the remote control command cannot be received over 5 minutes, the remote control connection is cancelled automatically.



### CAUTION

- If metallic window tint was applied to your vehicle, it may cause bad Bluetooth connection or performance degradation of the digital key.
- If multiple users operate the remote control function simultaneously, the connection between the digital key and the vehicle might result in failed commands. Please connect and operate the remote control function only the necessary user.
- When using the remote control operation, the driver (the remote control user) should leave the vehicle after confirming the door lock (the chime sounds once and the hazard warning lights blink).
- The remote functions of the Digital Key app enables the vehicle to be controlled from a set distance. If the digital key or the vehicle goes beyond the operable distance, the remote control function might be disconnected or cancelled.
- If the digital key (smartphone) is connected with the vehicle for the remote control, the driver with the key goes far away from the vehicle, the function might not work.
- If the remote control operation is executed where the mobile connection is weak, Bluetooth connection is poor due to several Bluetooth devices or there is an object such as metal or concrete, it might be delayed or the operable distance might decrease. You should not cover the smartphone with your hand or place other devices which can cause frequency interference. It may result in poor performance.
- If the remote control function is not available, please use NFC function to lock or unlock the doors.

#### Remote Start with Digital Key

- When the shift button of your vehicle is in P (Park) and all of the doors including trunk and hood is locked and the vehicle is off, press the Door Lock button in the Hyundai Digital Key app then press the Remote Start button within 4 seconds.
   You can confirm the vehicle is on if the hazard warning lights blinks two times and the chime sounds.
- If you want to turn off the vehicle, press Remote Vehicle Stop. Air Conditioner / Heating system maintains the same status as when you last used the vehicle.
- Unless you put the registered digital key(smartphone) on the interior authentication pad (wireless charger) when the remote start function is on, the vehicle will turn off.
- If you do not get on the vehicle within 10 minutes after the vehicle turns on, the vehicle will turn off.

## For more information, refer to the Vehicle Start/Stop button in chapter 6.

#### Vehicle information Display

The digital key application displays the vehicle information such as driving or door conditions through the communication with the vehicle.

- How to check: Select the vehicle what you want to check and touch the vehicle image, then vehicle information display page will be shown.
- Contents: accumulated odometer, latest fuel economy, driving range, fuel remaining, tire pressure, doors lock/unlock status and last data updated time.
- \* Displayed vehicle date could be differed from the current vehicle condition.
- \* For more information, please refer to the 'Tutorial' on your Digital key app.

#### Smartphone change/App deletion

If you change your smartphone or delete the Hyundai Digital Key App, please refer to the following to set up your Digital Key:

#### Smartphone Change/ Reset

If you change or reset the smartphone, the registered digital key in your previous smartphone may not be used. Please refer to following procedure to use the digital key.

- 1. Install the digital key application and log in.
- 2. If you are the owner, retry the Digital key save process.
- 3. If you are the sharer, need to re-share the key from owner.

App delete & reinstall/ Delete App data You can re-download the digital key from server in these cases as follow procedure.

- 1. Reinstall the application and log in.
- 2. Input the PIN number for user verification.
- If PIN is correct, digital key data will be re-downloaded to your smartphone and you can use it without any further registration or sharing.

Smartphone operability with Digital Key
The digital key application may not
be available to old type smartphones.
Please check the available smartphone
models with your dealer. NFC antenna
position on the smartphone can be
confirmed on each smartphone's manual
or contact to customer service center of
the smartphone manufacture.

### **!** CAUTION

- Do not leave the registered digital key (smartphone) and card key in your vehicle. Please carry around your keys all the times.
- If you happen to lose your digital key (smartphone) or card key registered as a main user's key, you should immediately delete the key on the vehicle's key menu. For more information, refer to the Digital Key Deletion in this chapter.
- If you registered your digital key (smartphone) or card key in the vehicle, a message appears on the instrument cluster and let you know the key is registered. (Message: Digital key(s) active.)
- If you buy a used vehicle, you should confirm the message and delete the registered smartphone key and card key. In this case, you should carry your smart key.
- If you keep place the NFC card of the digital key on the interior authentication pad (wireless charger) while driving, it may cause a malfunction of the NFC card.
- You should remove your NFC card of the digital key on the interior authentication pad after turning on the vehicle.
- Hyundai digital key app may not work properly when the NFC or Bluetooth communication between smartphone and car is not good.
- If the remote control operation is executed where the mobile connection is weak. Bluetooth connection is poor due to lots of Bluetooth devices or there is an object such as metal or concrete, it might be delayed or the operable distance might decrease. Especially, you should not cover the smartphone with your hand or place other devices which can cause frequency interference. It may result in poor performance.

- If the remote control function is not activated, please use NFC function to lock or unlock the doors
- · You should be careful not to press the remote control button on the digital key (smartphone) accidentally.
- If the digital key (smartphone) is discharged or defective or you cannot use the digital key since the vehicle battery is discharged, use the inside door lock button to lock all of the doors.



### **!** CAUTION

- Hyundai digital key app on the smartphone and card key may not work if any of the following occurs:
  - Hyundai digital key app on the smartphone is deleted. (Required to reinstall the app)
  - Account log in information of Hyundai digital key app is expired. (Required to re-log in)
  - When you try to log in to another smartphone instead of the registered smartphone with same user account.
  - Smartphone rooting or app hacking is detected.
  - Smartphone battery or the vehicle battery is discharged.
  - Smartphone's screen is off or
  - NFC or Bluetooth is turned off on the smartphone settings.
  - Smartphone's mobile network setting is off or airplane mode is activated.
  - A credit card is overlapped in the back of your smartphone or metal or thick case is used.
  - Use the card key with insert it into the wallet or card holder or overlapping with other cards.

- If you use a smart phone cover that uses wireless communication or is made of metal, the digital key NFC function may not work properly.
   Remove the smart phone cover before using the digital key NFC function.
- The vehicle may not be controlled by the smartphone if any of the following occurs:
  - Basic and necessary functions of the smartphone manufacturer are operating. (General call, urgent call, audio or NFC payment)
  - Wireless earphone is operating. (General call, urgent call or audio)
  - The digital key app function such as basic setting or app launching is limited by prior policy according to the manufacturer while using a smartphone produced by domestic and foreign manufactures.
- \* If you change the smartphone number, you should modify the user account information on the HYUNDAI customer web site to use the digital key app.
- \* If the vehicle owner changes the smartphone device, the new smartphone should be registered in the car after deleting the registered digital key(smartphone).
- \* If a sharer changes or reset the smartphone, the key should be reshared from owner.
- \* Some of the old smartphone may not work properly. Please check the available smartphone models with your dealer.
- \* NFC antenna position on the smartphone can be confirmed on each smartphone's manual or contact to customer service center of the smartphone manufacture.

### Digital key (Card key)

Digital key (Card key) save

- Install Hyundai digital key app in main user's smartphone and register the digital key (smartphone). Please refer to the registration method of the digital key (smartphone).
- Using the [Pair Card Key] menu on the digital key application, you can activate the Card Key registration mode.
- \* NFC authentication: enter the NFC authentication menu and contact the smartphone on the outside door handle.
- \* Bluetooth authentication: enter the Bluetooth authentication menu and press the [OK] button for activation. If you activate the registration mode, you should complete the Card saving process within 5 minutes.
- \* If you have not registered the digital key (smartphone), please register the digital key (card key) with two smart keys.

- Register the NFC card key on the User's Settings menu after turning on the vehicle.
- \* With Navigation screen: From the infotainment screen menu, go to [Setup] [Vehicle] [Digital Key] [Card Key] then select the [Save] from submenu.
- \* Without navigation screen: From cluster menu, go to [Digital Key] [Card Key] and select [Save].

The [Save] button will be disabled if the digital key (Card key) is already saved.

Please refer to "Digital Key Delete" in this manual and follow the digital key delete procedure in your car before Digital key save.

- Place the NFC card key onto the interior authentication pad (wireless charger). The saving process will begin automatically.
- If the key is enrolled, the message will be displayed on the infotainment screen or instrument cluster.
- Once the card key registration mode is activated, the process should be completed within 5 minutes. After then, you should reactivate once again for registration.
- For the digital key(card key) saving, the smart key(fob) must be exist inside of vehicle.
- Once a Card key is registered, it cannot be reuse onto another vehicle.

### Digital key (Card key) deletion

You should have the smart key to delete the digital key (card key) so please carry around the key.

- 1. Get on the vehicle with the smart key.
- Delete the NFC card key on the User's Settings menu after turning on the vehicle.
- \* With Navigation screen: From the infotainment screen menu, go to [Setup] [Vehicle] [Digital Key] [Card Key] then select the [Delete] from submenu.
- \* Without navigation screen: From cluster menu, go to [Digital Key] [Card Key] and select [Delete].

If there is no saved digital key(card key), [Delete] menu will not be activated.

- To delete the saved digital key (card key), the smart key must be exist inside the vehicle.
- The deleted digital key (card key) can be re-registered before registering a new digital key (card key).
- If you try to register a new digital key (card key), the previously registered digital key (card key) cannot be used again.



[1]: Door handle authentication pad

#### NFC door lock/unlock

You should contact digital key (card key) to door handle authentication pad (1, marked position near by the lock button) of driver's (or front passenger's) outside door for 2 seconds to lock or unlock the doors. If the Two Press Unlock feature is applied (press twice for unlocking), driver's seat door will be unlocked by contacting the digital key (card key). In this state, if you contact one more time within 4 seconds, all the doors unlock.

#### Inoperable condition

If you do not contact the digital key (card key) to the center of the door handle authentication pad accurately., it may not work. In addition, if you overlap and use the key with NFC-enabled cards such as transportation card or credit card, it does not work.

Note that if you try to lock your vehicle with digital key (card key) in following cases, the doors will not be locked and chime will sound for 3 seconds.

- · The Smart Key is in the vehicle.
- The Start/Stop button is in ACC or ON position.
- Any of the doors, hood and trunk are open

If the digital key (card key) does not work, please detach the key around 4 inches (0.1 m) from the handle authentication pad and retry to contact. The card key may be damaged by the impact. It would not work properly if the key is damaged. You should buy a new card and register again. Long-time exposure to high temperature may cause the card key to malfunction. Please be careful not to expose the key to direct sunlight or high temperature.

After unlock the door or start up the vehicle with digital key, even though the driver tries to lock the doors by the central door lock switch, the door lock will be once locked and immediately released at the moment of door closed.

#### Start-up with Card key

After placing your registered card key onto the interior authentication pad (wireless charger), step on the brake and press the Start/Stop button.

### **MARNING**

- If you do not place the digital key (card key) onto the center of the interior authentication pad (wireless charger) exactly, the card key may not be recognized. If the vehicle is not turned on, adjust and place the key again.
- If you overlap and use the key with NFC-enabled cards such as transportation card or credit card, the card key may not be recognized.
- If the digital key (card key) does not work, please detach the key around 4 inches (0.1 m) from the handle authentication pad and retry to contact.
- The card key may be damaged due to impact. It would not work properly if the key is damaged. You should buy a new card and register again.

For more information, refer to the Start/ Stop button in chapter 6.

### Digital key application/cancellation

If you do not want to use the digital key (smartphone and card key), you can disable the function temporarily. You should have the smart key when you change the settings

- \* With Navigation screen:
  From the infotainment screen menu,
  go to [Setup] [Vehicle] [Digital Key]
   [Enable Digital Keys] (deselect)
- Without navigation screen:
   From cluster menu, go to [Digital Key]
   [Enable Digital Keys] (deselect)

### *i* Information

For the digital key disable, the smart key must be exist inside the car. For the digital key enable, the smart key is not needed.



### CAUTION

If you uncheck Enable digital keys, it is impossible to lock or unlock the doors or start up the vehicle with digital keys such as smartphone and card key. If you check Enable digital keys again, the registered digital keys(smartphone and card key) are available. Even though you stop the digital key function, the registered keys (smartphone and card key) are not deleted.

## Personalized profile and vehicle settings

Connect the registered digital key with personalized profile. Then in case you lock or unlock the door with the digital key NFC function or unlock the door remotely by digital key application Bluetooth connection, the vehicle will play the personalized user profile settings. Profile connection and personalization are available for Driver 1 and Driver 2.

## Profile link/unlinked Profile link

- Select Setup → User Profile →
   Profile Settings → Link Digital Key
   (Smartphone) on the infotainment
   system menu.
- Unlock and place your smartphone on the wireless charger according to a message and it automatically starts to interwork.
- 3. It begins the profile link with a message.
- If you select Link, the registered phone number's digital key and the user's profile are linked.
- 5. The interconnection process is completed with a message.

#### Profile unlink

- Select Digital Key information on infotainment Vehicle Settings menu. It is possible to unlink only if the profile is interconnected.
- 2. Profile unlink is completed with a message.

### *i* Information

If you connect both Driver 1 and Driver 2 with a single smartphone, the smartphone digital key always works as Driver 1.

If you unlink the Driver 1, personalization function will operate as Driver 2.

### PRECAUTION for vehicle profile link and unlink

When you link or unlink the profile of digital key, you should be careful of the following.

- Profile link is possible to use with the digital key. (Infotainment Vehicle Settings Mode → Digital Key → Enable Digital Keys)
- Profile link information remains even when you set the digital key function disable.
- Only the smart phone with digital key app enables you to link your profile. (Impossible to link with NFC card)
- Profile link works only when the smart phone and the digital key are registered to the vehicle. The smart phone with another vehicle's digital key cannot link profile.
- If you remove the smart phone from the wireless charger before completing the profile link, it does not work
- To unlink the profile, the smart phone does not need to be on the wireless charger.

### Vehicle personalization operation

The personalization function linked with digital key works as following conditions:

- Contact the driver's door handle with the profile linked smart phone to lock or unlock the doors (Personalization does not operate when locking or unlocking the front passenger door.)
- Remote door unlock with the profile linked smartphone digital key app.

The profile linked with digital key can be changed manually in the infotainment system setup screen.

## Precaution for digital key profile link and unlink

Profile operation according to door lock/unlock system is as follows.

Item	Personalization Operation
Initial value	Guest
Profile linked smart phone key	Linked profile
Profile unlinked smart phone key	Recently activated profile
NFC card key	
Smart key	

- The personalization function using the digital key can be operated after linking the digital key on the infotainment system profile menu.
- You should use the personalization function during stopping your vehicle safely.

Vehicle personalization with digital key

The available personalization function in the vehicle is as follows.

System	Personalization Item	
USM	Lamp	Blink number of one-touch signal lamps
	Cluster	Information display on the cluster, Voice volume, Welcome sound, Theme selection
	Seat/Mirror	-
	Door	Automatic door lock/unlock, Two Press Unlock
	Air conditioning	Temperature unit, shut off outside air (interlocked with washer fluid), Automatic ventilation, Auto defogging on/off
	Convenience	Wireless charging system on/off
	NFC	Digital key on/off, Smartphone Key Paring/Deletion, Card key Save/Delete
AVN	Navigation	Preferred volume of the navigation system, Recent destination
	User preset	Radio preset
	Phone connectivity	Bluetooth preferential connect CarPlay/Android Auto/MirrorLink On/Off
Air conditioning	Operating condition	Latest operation setup of the following functions: Temperature, AUTO, air flow direction, air volume, air conditioner, air intake control, SYNC, Front windshield defroster, OFF
Driving	Smart mode	-

For more information of personalization, refer to the infotainment system manual.



## **CAUTION**

If you leave the digital key after locking or unlocking the doors or starting up the vehicle with the smart key, the doors can be locked by the central door lock. Please carry around the digital key all the time.

## **DOOR LOCKS**

# Operating Door Locks From Outside the Vehicle

## Mechanical key



Turn the key toward the rear of the vehicle to unlock and toward the front of the vehicle to lock.

If you lock/unlock the driver's door with a key, the driver's door will lock/unlock automatically.

Once the doors are unlocked, they may be opened by pulling the door handle.

When closing the door, push the door by hand. Make sure that doors are closed securely.

## Smart key





To lock the doors, press the button on the outside door handle while carrying the smart key with you or press the door lock button on the smart key.

To unlock the doors, press the button on the outside door handle while carrying the smart key with you or press the door unlock button on the smart key.

Once the doors are unlocked, they may be opened by pulling the door handle.

When closing the door, push the door by hand. Make sure that doors are closed securely.

## *i* Information

- In cold and wet climates, door lock and door mechanisms may not work properly due to freezing conditions.
- If the door is locked/unlocked multiple times in rapid succession with either the vehicle key or door lock switch, the system may stop operating temporarily in order to protect the circuit and prevent damage to system components.

# Operating Door Locks From Inside the Vehicle

#### With the door lock button



- 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.
- Doors cannot be locked if the smart key is in the vehicle and any door is open.

## *i* 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.
- Lower a front window and use the mechanical key to unlock the door from outside.

#### With the door handle

#### Front door

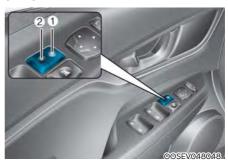
If the inner door handle is pulled when the door is locked, the door will unlock and open.

#### Rear door

If the inner door handle is pulled once when the door is locked, the door will unlock.

If the inner door handle is pulled once more, the door will open.

# With the central door lock/unlock switch



When pressing the  $(\bigcap)$  portion (2) on the switch, all vehicle doors will lock.

- If any door is opened, the doors will not lock even though the lock button (2) of the central door lock switch is pressed.
- If the smart key is in the vehicle and any door is opened, the doors will not lock even though the lock button (2) of the central door lock switch is pressed.

When pressing the  $(\frac{1}{1})$  portion (1) on the switch, all vehicle doors will unlock.



## 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**

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 START/STOP button 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.

# Auto Door Lock/Unlock Features

# Impact sensing door unlock system (if equipped)

All doors will be automatically unlocked when an impact causes the air bags to deploy.

# Speed sensing door lock system (if equipped)

All doors will be automatically locked when vehicle speed exceeds 9 mph (15 km/h).

You can activate or deactivate the Auto Door Lock/Unlock features from the User Settings mode on the LCD display. For more details, refer to "LCD Display" in this chapter.

## **Child-protector Rear Door Locks**



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.

### Rear Occupant Alert (ROA)

This function prevents the driver from leaving a passenger in the rear seats.

If your vehicle is equipped with additional navigation, please refer to the infotainment system manual separately supplied.



## NOTICE

When the driver turns off the vehicle and opens the driver's door after opening and closing a rear door, a warning message "Check rear seats" appears.



## WARNING

The rear seat passenger alarm system provides information to the driver to check the rear seats but it does not detect whether there is an object or passenger in the back seats. Please check the rear seats always when leaving the vehicle.



## CAUTION

The door open and close history is initialized if the driver turns off the vehicle and locks the vehicle doors.

Even though the rear door is not opened again, the alarm may sound if there is the previous record. For example, if the driver does not lock the vehicle door and opens the door to get off after the alarm sounds, the alarm may go off.

## **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 (for smart key) and wait for 30 seconds.
- 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 off or if the power steering system becomes inoperative, the vehicle may still be steered, but it will require increased steering effort.

Also, the steering effort becomes heavier as the vehicle's speed increases and becomes lighter as the vehicle's speed decreases for better control of the steering wheel.

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

## NOTICE

- If the Motor Driven Power Steering System does not operate normally, the warning light () will illuminate or blink on the instrument cluster. The steering wheel may become difficult to control or operate. Take your vehicle to an authorized HYUNDAI dealer to have the system checked as soon as possible.
- When abnormality is detected in the electric power steering system, to prevent a deadly accident, the steering assist function will stop. At this time, the warning light turns on or blinks on the cluster. The steering wheel may become difficult to control or operate. Have your vehicle checked immediately, after moving the vehicle to a safe zone.

## Information

The following symptoms may occur during normal vehicle operation:

- The steering effort may be high immediately after placing the START/ STOP button in the ON position.
  - This happens as the system performs the MDPS system diagnostics. When the diagnostics are 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 START/STOP button is placed 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 temperatures, abnormal noise may occur. If the temperature rises, the noise will disappear. This is a normal condition.
- When the vehicle is stationary, if you turn the steering wheel all the way to the left or right continuously, the steering wheel effort increases. This is not a system malfunction. As time passes, the steering wheel effort will return to its normal condition.

## **Tilt Steering/Telescopic Steering**



## WARNING

Never adjust the steering wheel while driving. You may lose steering control and cause severe personal injury, death or accidents.



## i Information

After adjustment, sometimes the lockrelease 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.



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). Move the steering wheel, so it points toward your chest, not toward your face. Make sure you can see the instrument panel warning lights and gauges.
- 3. Pull up the lock-release lever to lock the steering wheel in place.

Push the steering wheel both up and down to be certain it is locked in position.



## CAUTION

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

# Heated Steering Wheel (if equipped)



When the vehicle is ON, 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 turn off automatically approximately 30 minutes after the heated steering wheel is turned on.

## NOTICE

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

#### Horn



To sound the horn, press the area indicated by the horn symbol on your steering wheel. 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.

## **MIRRORS**

### **Inside Rearview Mirror**

Before you start driving, adjust the rearview mirror to the center on the view through the rear window.



## 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 restaints 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 that may cause the liquid cleaner to enter the mirror housing.

## Day/night rearview mirror (if equipped)



[A]: Day, [B]: Night

Make this adjustment before you start driving and while the day/night lever is in the day position.

Pull the day/night lever towards you to reduce glare from the headlights of the vehicles behind you during night driving.

Remember that you lose some rearview clarity in the night position.

### Electrochromic mirror (ECM) with HomeLink® system, Blue Link® and compass (if equipped)



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 traveling. The HomeLink® Universal Transceiver allows you to activate your garage door(s), electric gate, home lighting, etc.

- (1) HomeLink Channel 1
- (2) HomeLink Channel 2
- (3) HomeLink Channel 3
- (4) Garage Door Opener Status Indicator: Closing or Closed
- (5) HomeLink Operation Indicator
- (6) Garage Door Opener Status Indicator: Opening or Opened
- (7) HomeLink User Interface Indicator

 $\begin{tabular}{ll} Automatic-Dimming Night Vision Safety $^{TM}$ \\ (NVS@) Mirror (if equipped) \end{tabular}$ 

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

Your mirror will automatically dim upon detecting glare from the vehicles traveling behind you.

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

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

## Integrated HomeLink® Wireless Control System

The HomeLink® Wireless Control System provides a convenient way to replace up to three hand held radio-frequency transmitters used to activate compatible devices such as gate operators, garage door openers, entry door locks, security systems, and home lighting.

## NOTICE

HomeLink® operates while the ignition switch is in the ACC or ON position for safety reasons. It is to prevent unintentional security problems from happening when the vehicle is parked outside the garage.

## A

### WARNING

Before programming HomeLink® to a garage door opener or gate operator, make sure people and objects are out of the way of the device to prevent potential harm or damage. Do not use the HomeLink® with any garage door opener that lacks the safety stop and reverse features required by U.S. federal safety standards (this includes any garage door opener model manufactured before April 1, 1982). A garage door that cannot detect an object - signaling the door to stop and reverse - does not meet current U.S. federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

For more information, contact HomeLink® at www.homelink.com, or call Home-Link customer support at 1-800-355-3515.

It is also recommended that a new battery be replaced in the handheld transmitter of the device being trained to HomeLink® for quicker training and accurate transmission of the radio frequency.

#### 1. Programming HomeLink®

The following steps show how to program HomeLink. If you have any questions or are having difficulty programming your HomeLink buttons, refer to the HomeLink website or call the HomeLink customer support toll-free number. Do this, before going back to the dealer who sold you the car.

- Visit the HomeLink website at: www. homelink.com. Then at the top of the page, choose your vehicle make. Then watch the You Tube video, and/or access additional website information.
- If you choose to access the website via your cell phone, scan the QR code.



 Or, call HomeLink customer support at 1-800-355-3515 (Please have the vehicle make/model AND the opener device make/model readily available.)

#### 1) Programming Preparation



- 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 handheld transmitter of the device being programmed to HomeLink for quicker training and accurate transmission of the radiofrequency signal.
- Place the ignition switch to the ACC (Accessory) position for programming of HomeLink.

### 2) Programming a New HomeLink®

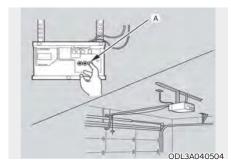


 Press and release the HomeLink button (1), (2) or (3), you would like to program. The HomeLink indicator light (7) will flash orange slowly (if not, perform the steps of "Erasing HomeLink Buttons" section, and start over).



- 2. Position the garage door opener remote 1 3 inches (2 8cm) away from the HoleLink buttons.
- 3. While the HomeLink indicator light (7) is flashing orange, press and hold the hand-held remote button. Continue pressing the handheld remote button until the HomeLink indicator light (7) light changes from orange to green. You may now release the handheld remote button.
- Wait until your garage door comes to a complete stop, regardless of position, before proceeding to the next steps.

- Press and release the HomeLink button you are programming and observe the indicator light.
  - If the indicator light remains solid green, your device should operate when the HomeLink button is pressed. At this point, if your device operates, programming is complete.
  - If the indicator light rapidly flashes green, firmly press, hold for two seconds and release the HomeLink button up to three times in a row slowly to complete the programming process. Do not press the HomeLink button rapidly. At this point if your device operates, programming is complete. If the device does not operate, continue with step 6.
- 6. At the garage door opener motor, (security gate motor, etc.) locate the "Learn", "Smart", "Set" or "Program" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit (see the device's manual to identify this button). The name and color of the button may vary by manufacturer.



- \* A ladder and/or second person may simplify the following steps.
- 7. Firmly press and release the "Learn", "Smart", "Set" or "Program" button. You now have up to 30 seconds in which to complete the next step.
- 8. Return to the vehicle and firmly press, hold for two seconds and release, the HomeLink button up to three times in a row slowly. Do not press the HomeLink button rapidly. As soon as you see the garage door start to move, stop pressing any buttons until a few seconds after the garage door has come to a complete stop, regardless of position. At this point, programming is complete and your device should operate when the HomeLink button is pressed and released.

# Two-Way Communication Programming (For select garage door openers)

If your garage door opener has the 'myQ' logo on its side, your opener likely has Two-Way Communication capability. HomeLink has the capability to establish Two-Way Communication with your garage door opener. HomeLink can receive and display "closing" or "opening" status messages from compatible garage door openers. At any time, Home-Link can also recall and display the last recorded status communicated by the garage door opener to indicate your garage door being "closed" or "opened".

To check if your garage door opener is compatible with this feature, refer to www.homelink.com/compatible/ Two-way-Communication. If your garage door opener has this functionality, AND the Two-Way Communication indicators (4), (6) in the mirror appear while the garage door is opening/closing, then no further steps are needed. Two-Way Communication Programming is already complete.

However, if your garage door opener has this functionality, AND the Two-Way Communication indicators (4), (6) in the mirror DO NOT appear while the garage door is opening/closing, use the following instructions to enable this functionality.

- In your vehicle, press and hold the programmed HomeLink button for 2 seconds, then release. Confirm that the garage door is moving. AFTER it stops, you will have one minute to complete the following steps:
- \* A ladder and/or second person may simplify the following steps.
- On your garage door opener in your garage, locate the "Learn" button (usually near where the hanging antenna wire is attached to the garage door opener). If there is difficulty locating this button, reference the device's owner's manual.
- 3. Press and release the "Learn" button.
- A light on your garage door opener may flash, and your Two-Way Communication indicators (4), (6) in your vehicle may flash, confirming completion of the process.
- 5. Return to the vehicle and firmly press and release the programmed HomeLink button to activate your garage door. The Two-Way Communication indicators (4), (6) flash in orange when the door is moving. Do not make any additional button presses until AFTER the garage door has come to a complete stop.
- 6. Your Two-Way Communication programming is now complete.

## Information

If your garage door opener has Two-Way Communication functionality, it is possible for HomeLink to stop functioning the garage door shortly after initial programming, IF the Two-Way Communication Programming wasn't properly completed. This usually happens after the first 10 times a programmed HomeLink button is pressed. If you experience this, completing the "Programming a New HomeLink Button" and "Two-Way Communication Programming" will restore door operation.

#### 4) Canadian Programming

Canadian radio-frequency laws require transmitter remote signals to "time-out" (or quit) after a couple seconds of transmission, which may not be long enough for HomeLink to pick up the signal during programming.

If you live in Canada or you are having difficulties programming a gate operator or garage door opener by using the programming procedures, replace "Programming a New HomeLink Button" step 3 with the following:

While the HomeLink indicator light (7) is flashing orange, press and release ("cycle") your device's handheld remote every two seconds until the HomeLink indicator light (7) changes from orange to green. You may now release the handheld remote button. Then proceed with "Programming a New HomeLink Button" step 4.

# 2. Operating HomeLink® 1) Operating HomeLink®



 Press and release the desired programmed HomeLink button (1, 2 or 3).

## *i* Information

The HomeLink indicator (7) should light green, solid or flashing, and your programmed device should operate.

If your device does not operate, the HomeLink programming was not successful, and you'll need to reprogram the button.

#### 2) Two-Way Communication Display Behavior



 Press and release one of the programmed HomeLink buttons (1, 2 or 3).



The indicator (4) and (6) operates as below, if your garage door opener has Two-Way Communication functionality.

- If the indicator (4) flashes in Orange, it indicates that the garage door is "Closing".
- The indicator (4) turns solid green once the garage door has closed.
- If the indicator (6) flashes in Orange, it indicates that the garage door is "Opening".
- The indicator (6) turns solid green once the garage door has fully opened.
- If the indicator (4) or (6) does not turn to green, it indicates that the last status of garage door was not received properly. The HomeLink mirror tries to receive the last known status of the garage door for a few seconds.

#### 3) Recalling Garage Door Status

HomeLink mirror with Two-Way Communication provides a way to view the last stored message from the garage door opener. In order to recall the last known status of the last activated device, press the buttons "1 and 2" OR "2 and 3" simultaneously.

- If the indicator (4) appears solid Green, it indicates that the last activated device was "closed" properly.
- If the indicator (6) appears solid Green, it indicates that the last activated device was "open" properly.

- 3. Erasing HomeLink® Buttons
- 1) Erasing and Reprogramming a Single HomeLink® Button:
- Press and hold the desired HomeLink button you want to re-program. DO NOT release the button.
- 2. The HomeLink indicator light (7) will illuminate solid green. Release the button as soon as the HomeLink indicator light (7) begins to flash orange, usually about 20 seconds.
- Proceed with the steps in the "Programming a New HomeLink Button" section.

## **information**

If you do not complete the reprogramming of a new device to the button, it will revert to the previously stored programming.

2) The following instructions will erase ALL HomeLink® programming from ALL buttons:



- 1. Press and hold the buttons (1) and (3) simultaneously.
- 2. The HomeLink indicator light (7) will illuminate solid Orange for about 10 seconds.
- Release the buttons once the HomeLink indicator light (7) changes to Green and flashes rapidly.
- Now all three HomeLink buttons (1), (2) and (3) are cleared of any programming.

## **information**

HomeLink® and the HomeLink® House logo are registered trademarks of Gentex Corporation.

The myQ logo is a registered trademark of The Chamberlain Group, Inc.

#### FCC (USA) and ISED (Canada)

This device complies with FCC rules part 15 and Innovation, Science, and Economic Development Canada RSS-210. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference that may be received including interference that may cause undesired operation. WARNING: The transmitter has been tested and complies with FCC and ISED rules. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment complies with FCC and ISED radiation exposure limits set forth for an uncontrolled environment. End Users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must be at least 8 inch (20 cm) from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.

### FCC (Htats-Unis) et ISED (Canada)

Cet appareil est conforme aux règlements de la FCC, section 15, et au CNR-210 d'Innovation, Sciences et Dhveloppement économique Canada. Le fonctionnement est assuietti aux deux conditions suivantes: (1) cet appareil ne doit pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris celle qui pourrait entraîner un dysfonctionnement. MISE EN GARDE : L'émetteur a subi des tests et est conforme aux règlements de la FCC et d'ISDE. Les changements ou modifications non approuvés explicitement par la partie responsable de la conformité pourraient rendre caduque l'autorisation de l'utilisateur de se servir du dispositif.

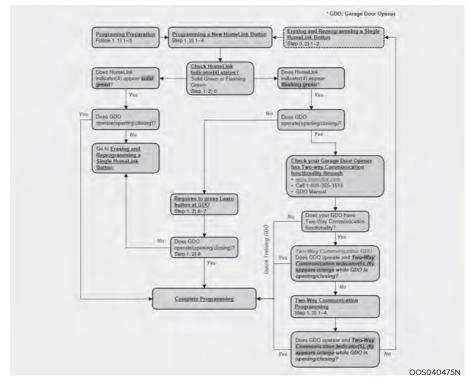
Cet appareil est conforme aux limites d'exposition aux radiations de la FCC et d'ISDE établies pour un environnement non contrôlé. Les utilisateurs finaux doivent respecter les instructions d'utilisation spécifiques pour satisfaire aux exigences de conformité aux expositions de RF.

L'émetteur doit se trouver à 8 inch (20 cm) au minimum de l'utilisateur et ne doit pas être situé au même endroit que tout autre émetteur ou antenne ni fonctionner avec un autre émetteur ou antenne.

#### Méjico

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo pueda no causar interferencia dañina, y (2) este dispositivo o dispositivos deben aceptar cualquier interferencia, que incluye la interferencia que puede causar su operación no deseada.

## **HomeLink 5 Programing Flow Chart**



### **Side View Mirrors**



Be sure to adjust mirror angles before driving.

Your vehicle is equipped with both lefthand and right-hand outside rearview mirrors

The mirror can be adjusted remotely with the remote switch.

The mirror heads can be folded to prevent damage during an automatic car wash or when passing through a narrow street.

## **!** WARNING

- The right side view mirror are convex. In some states, the left outside rearview mirror is also convex. Objects seen in the mirror are closer than they appear.
- Use your interior rearview mirror or turn your head and look to determine the actual distance of following vehicles when changing lanes.

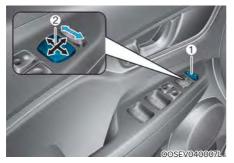
## **MARNING**

Do not adjust or fold the outside rearview 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.

## Adjusting the rearview mirrors



- Press either the L (left side) or R (right side) button (1) to select the rearview mirror you would like to adjust.
- Use the mirror adjustment control (2) to position the selected mirror up, down, left or right.
- 3. After adjustment, put the button into neutral (center) position to prevent inadvertent adjustment.

## NOTICE

- The mirrors stop moving when they reach the maximum adjusting angles, but the motor continues to operate while the switch is pressed. Do not press the switch longer than necessary, the motor may be damaged.
- Do not attempt to adjust the outside rearview mirror by hand otherwise the motor may be damaged.

## Folding the outside rearview mirror



Manual type

To fold the outside rearview mirror, grasp the housing of the mirror and then fold it toward the rear of the vehicle.



Electric type (if equipped)

Left: The mirror will unfold.

Right: The mirror will fold.

**Center (AUTO)**: The mirror will fold or unfold automatically as follows:

- · With smart key system
  - The mirror will fold or unfold when the door is locked or unlocked by the smart key and "Welcome mirror" in the User Setting Mode on the LCD display is activated.
  - The mirror will fold or unfold when the door is locked or unlocked by the button on the outside door handle and "Welcome mirror" in the User Setting Mode on the LCD display is activated.

## NOTICE

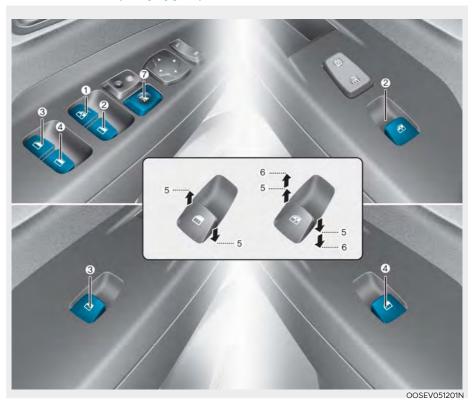
The electric type outside rearview mirror operates even though the START/STOP button is in the OFF position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the vehicle is not running.

## NOTICE

Do not fold the electric type outside rearview mirror by hand. It could cause motor failure.

## **WINDOWS**

## **Power Windows (if equipped)**



- (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\*
- (7) Power window lock switch
- \*: if equipped

The START/STOP 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 passenger windows. The power windows will operate for approximately 30 seconds after the START/STOP button is placed in the ACC or OFF position. However, if the front doors are opened, the Power Windows cannot be operated 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.

## *i* 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 1 inch (2.5 cm). If you experience the noise with the sunroof open, slightly close the sunroof.

## Window opening and closing



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 down window (if equipped)

Pressing the power window switch momentarily to the second detent position (6) completely lowers 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.

## 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 START/STOP button to the ON position.
- Close the window and continue pulling up on the power window switch for at least one second.

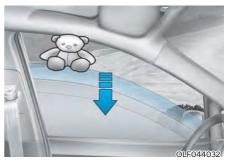
If the power windows do not operate properly after resetting, it is recommended that the system be checked by an authorized HYUNDAI dealer.



## 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



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

When the power window lock switch is pressed:

- The driver's master control can operate all the power windows.
- The front passenger's control can operate the front passenger's power window.
- The rear passenger's control cannot operate the rear passengers' power window.

## 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.

## ! WARNING

- NEVER leave the keys in your vehicle with unsupervised children, when the vehicle is running.
- NEVER leave any child unattended in the vehicle. Even very young children may inadvertently cause the vehicle to move, entangle themselves in the windows, or otherwise injure themselves or others.
- · Always double check to make sure all arms, hands, head and other obstructions are safely out of the way before closing a window.
- Do not allow children to play with the power windows. Keep the driver's door power window lock switch in the LOCK position (pressed). Serious injury can result from unintentional window operation by the child.
- Do not extend your head, arms or body outside the windows while driving.

## **SUNROOF (IF EQUIPPED)**

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



The sunroof can be operated for approximately 30 seconds after the Start/Stop button is in the ACC or OFF position.

The sunroof can be operated for approximately 30 seconds after the START/STOP button is removed or turned to the ACC or LOCK/OFF position.

However, if the front door is opened, the sunroof cannot be operated even within 30 seconds.

## *i* Information

- In cold and wet climates, the sunroof may not work properly due to freezing conditions.
- After the vehicle is washed or in a rainstorm, be sure to wipe off any water that is on the sunroof before operating it.

## **⚠** WARNING

- Adjust the sunroof or sunshade when your vehicle stops. This could result in loss of control and an accident that may cause death, serious injury, or property damage.
- Make sure heads, other body parts or objects are out of the way before using the sunroof.
- Do not extend your head, arms or body outside the sunroof while driving, to avoid serious injury.
- Do not leave the vehicle on 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 injuries or vehicle damage.

## NOTICE

- Do not continue to move the sunroof control lever after the sunroof is fully opened, closed, or tilted. Damage to the motor or system components could occur.
- Make sure the sunroof is closed fully when leaving your vehicle.
  - If the sunroof is open, rain or snow may leak through the sunroof and wet the interior as well as allow theft.

## **Sunroof Opening and Closing**



#### To open:

Press the sunroof control lever backward to the first detent position. Release the switch when you want the sunroof to stop.

#### To close:

Press the sunroof control lever forward to the first detent position. Release the switch when you want the sunroof to stop.

## **Sliding the Sunroof**

Pressing the sunroof control lever backward or forward momentarily to the second detent position completely opens or closes the sunroof even when the switch is released. To stop the sunroof at the desired position while the sunroof is in operation, press the sunroof control lever backward or forward and release the switch.

## *i* Information

To reduce wind noise while driving, it is recommended that you drive with the sunroof slightly closed (stop the sunroof about 2.7 inch (7 cm) before the maximum slide open position).

## Automatic reverse (if equipped)



If the sunroof senses any obstacle while it is closing automatically, it will reverse direction then stop to allow the object to be cleared

The auto reverse function does not work if a small obstacle is between the sliding glass and the sunroof sash.

You should always check that all passengers and objects are away from the sunroof before closing it.



### WARNING

Small objects that can get caught between the sunroof glass and the front glass channel may not be detected by the automatic reverse system. In this case, the sunroof glass will not detect the object and will not reverse direction.

## **Tilting the Sunroof**



Tilt the sunroof open:

Push the sunroof control lever upward until the sunroof moves to the desired position.

To close the sunroof:

Press the sunroof lever forward until the sunroof moves to the desired position.

## NOTICE

- Periodically remove any dirt that may accumulate on the sunroof guide rail or between the sunroof and roof panel, which can make a noise.
- Do not try to open the sunroof when the temperature is below freezing or when the sunroof is covered with snow or ice, otherwise the motor could be damaged. In cold and wet climates, the sunroof may not work properly.

#### Sunshade



The sunshade will open automatically with the sunroof when the glass panel moves. If you want it closed, move the sunshade manually.

## NOTICE

The sunroof is made to slide together with the sunshade. Do not leave the sunshade closed while the sunroof is open.

## **Resetting the Sunroof**

The sunroof may need to be reset if the following conditions occur:

- The battery is discharged or disconnected or the sunroof fuse has been replaced or disconnected
- The one-touch sliding function of the sunroof does not normally operate

To reset the sunroof, perform the following steps:

- Place the START/STOP button to the ON position or when the vehicle is in the ready ( ) mode. It is recommended to reset the sunroof while the vehicle is in the ready ( ) mode
- Push the control lever forward. The sunroof will close completely or tilt depending on the condition of the sunroof.
- 3. Release the control lever when the sunroof stops moving.

- 4. Push the control lever forward for about 10 seconds.
  - When the sunroof is in the closed position:
  - The glass will tilt and slightly move up and down.
  - When the sunroof is in the tilt position:

The glass will slightly move up and down.

Do not release the lever until the operation is completed.

If you release the lever during operation, try again from step 2.

5. Within 3 seconds, push the control lever forward until the sunroof operates as follows:

Tilt down  $\rightarrow$  Slide Open  $\rightarrow$  Slide Close.

Do not release the lever until the operation is completed.

If you release the lever during operation, try again from step 2.

Release the sunroof control lever after all operation has completed (The sunroof system has been reset).

## *i* Information

- If the sunroof does not reset when the vehicle battery is disconnected or discharged, or related fuse is blown, the sunroof may not operate normally.
- For more detailed information, contact an authorized HYUNDAI dealer.

# Sunroof Open Warning (if equipped)

- If the driver turns off the vehicle when the sunroof is not fully closed, the warning chime will sound for approximately 3 seconds and the open sunroof warning appear on the LCD display.
- If the driver turns off the vehicle and opens the door when the sunroof is not fully closed, the open sunroof warning will appear on the LCD display until the door is closed or the sunroof is fully closed.

Close the sunroof securely when leaving your vehicle.

#### **EXTERIOR FEATURES**

#### Hood

## Opening the hood



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



- 3. Go to the front of the vehicle, raise the hood slightly, push the secondary latch up (1) inside of the hood center and lift the hood (2).
- 4. Pull out the support rod.



5. Hold the hood open with the support rod (3).

## **⚠** WARNING

- Grasp the support rod in the area wrapped in rubber. The rubber will help prevent you from being burned by hot metal.
- The support rod must be inserted completely into the hole provided whenever you inspect the motor compartment. This will prevent the hood from falling and possibly injuring you.

### Closing the hood

- Before closing the hood, check the following:
  - All filler caps in motor room must be correctly installed.
  - Gloves, rags or any other combustible material must be removed from the motor compartment.
- 2. Return the support rod to its clip to prevent it from rattling.
- Lower the hood halfway (lifted approximately 12 inch (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.

## **MARNING**

- 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. If the hood is not latched while the vehicle is moving, the chime will sound to warn the driver the hood is not fully latched. 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.

#### Liftgate Opening the liftgate



Make sure the vehicle is in P (Park) and set the parking brake.

Then do one of the following:

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

#### Closing the liftgate



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 button.

#### NOTICE

To prevent damage to the liftgate lift cylinders and the attached hardware, always close the liftgate before driving.



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

## **⚠** WARNING



Do not hold the part (gas lifter) that supports the liftgate. Be aware that the deformation of the part may cause vehicle damage and a risk of injury.

### **MARNING**

- NEVER allow anyone to occupy the luggage compartment of the vehicle at any time. If the liftgate is partially or totally latched and the person is unable to get out, serious injury or death could occur due to lack of ventilation, and rapid heat buildup, or because of exposure to cold weather conditions. The luggage compartment is also a highly dangerous location in the event of a crash because it is not a protected occupant space but is a part of the vehicle's crush zone.
- Your vehicle should be kept locked and keys should be kept out of the reach of children. Parents should teach their children about the dangers of playing in luggage compartments.

#### Emergency liftgate safety release



Your vehicle is equipped with the emergency liftgate safety release lever located on the bottom of the liftgate. When someone is inadvertently locked in the luggage compartment. The liftgate can be opened by doing as follows:

- 1. Insert the key into the hole.
- 2. Push the release lever to the right by a key.
- 3. Push up the liftgate.

## **MARNING**

- For emergencies, be fully aware of the location of the emergency liftgate safety release lever in the vehicle and how to open the liftgate if you are accidentally locked in the luggage compartment.
- 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 with extreme caution, especially while the vehicle is in motion.

## **Charging Door** *Opening the charging door*



- 1. Depress the brake pedal and apply the parking brake.
- 2. Turn OFF all switches, shift to P (Park), and turn OFF the vehicle.
- Push the charging door where the icon is located to open. The charging door opens only when the vehicle is unlocked.

## *i* Information

If you cannot open the charging door due to freezing weather, tap lightly or remove any ice near the charging door. Do not try to forcibly open the charging door.

#### Closing the charging door



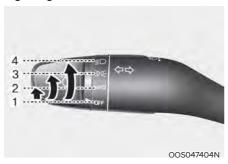
- After recharging, install the charging inlet cover.
- 2. Close the charging door until it is latched securely.

For more details, refer to the Electric Vehicle Guide provided in the front of the owner's manual.

#### **LIGHTING**

#### **Exterior Lights**

#### Lighting control



To operate the lights, turn the knob at the end of the control lever to one of the following positions:

- (1) OFF
- (2) AUTO light
- (3) Position lamp
- (4) Headlight

#### **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 :

- The headlights are ON.
- · The parking brake is applied.
- · The vehicle is turned off.



#### **AUTO light (if equipped)**

When the light switch is in the AUTO position, the position lamp and headlight will be turned ON or OFF automatically depending on the amount of light outside the vehicle.

Even with the AUTO light feature in operation, it is recommended to manually turn ON the lamps when driving at night or in fog, or when you enter dark areas, such as tunnels and parking facilities.

#### NOTICE

- Do not cover or spill anything on the sensor (1) located on 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 light system may not work properly.



#### Position lamp (→)€)

The position lamp, license plate lamp and instrument panel lamp are turned ON.



#### Headlight (≦○)

The headlight, position lamp, license plate lamp and instrument panel lamp are turned ON.



#### Information

The START/STOP button must be in the ON position to turn on the headlight.

#### High beam operation



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.



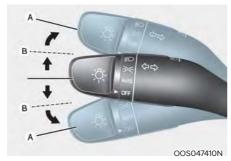
### WARNING

Do not use high beam when there are other vehicles approaching you. Using high beam could obstruct the other driver's vision.



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



To signal a turn, push down on the lever for a left turn or up for a right turn in position (A). To signal a lane change, move the turn signal lever slightly and hold it in position (B). The lever will return to the OFF position when released or when the turn is completed.

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 a one-touch turn signal function, move the turn signal lever slightly and then release it. The lane change signals will blink 3, 5 or 7 times.

You can activate/deactivate the One Touch Turn Signal function or choose the number of blinks (3, 5, or 7) from the User Settings mode on the LCD display. For more details, refer to "LCD Display" in chapter 4.

#### Battery saver function

The purpose of this feature is to prevent the battery from being discharged. The system automatically turns off the position lamp when the driver turns the vehicle off and opens the driver-side door.

With this feature, the position lamps will turn off automatically if the driver parks on the side of the road at night.

If necessary, to keep the lamps on when the vehicle is turned off, perform the following:

- (1) Open the driver-side door.
- (2) Turn the position lamps OFF and ON again using the light switch on the steering column.

## Headlight delay function (if equipped)

If you place the START/STOP button to the ACC or OFF position with the headlights ON, the headlights (and/or position lamps) remain on for about 5 minutes. However, with the vehicle off if the driver's door is opened and closed, the headlights (and/or position lamps) are turned off after 15 seconds.

The headlights (and/or position 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. However, if you turn the light switch to the AUTO position when it is dark outside, the headlights will not be turned off.

You can activate or deactivate the Headlight Delay function from the User Settings mode on the LCD display. For more details, refer to "LCD Display" in chapter 4.

#### **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 headlights before getting out of the vehicle.

## Welcome System (if equipped) Headlight and position lamp

When the headlight (lamp switch in the headlight or AUTO position) is on and all doors (and liftgate) are locked and closed, the position lamp and headlight will come on for 15 seconds when the door unlock button is pressed on the smart key.

At this time, if you press the door lock or unlock button, the position 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 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, 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 and the vehicle enters the armed stage of the theft alarm system, the lamps will go off five seconds later.

#### Front lamps





#### Front map lamp (1)

Press either of these lens 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 Door Lamp $( \stackrel{\boxtimes}{\bigcirc} ) (2)$ :

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 START/STOP but ton 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 START/STOP button in the ACC position or the OFF position, the front and rear lamps stay on for about 20 minutes.

#### Front room lamp

- (3):
  Press the button to turn ON the room lamp for the front/rear seats.
- (4):
   Press the button to turn OFF the room lamp for the front/rear seats.

#### Rear lamps





**Rear Room Lamp Switch:** 

Press this button to turn the room lamp on and off.

### NOTICE

Do not leave the lamp switches on for an extended period of time when the vehicle is turned off.

#### Luggage compartment lamp



The luggage compartment lamp comes on when the liftgate is opened.

#### NOTICE

The luggage compartment lamp comes on as long as the liftgate is open. To prevent unnecessary charging system drain, close the liftgate securely after using the liftgate.

#### Vanity mirror lamp (if equipped)



Push the switch to turn the light on or off.

- The lamp will turn on if this button is pressed.
- O : 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.

#### **HIGH BEAM ASSIST (HBA) (IF EQUIPPED)**



High Beam Assist will automatically adjust the headlight range (switches between high beam and low beam) depending on the brightness of detected vehicles and certain road conditions.

## Detecting sensor (Front view camera)



[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 picture above for the detailed location of the detecting sensor.

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA)" section in chapter 7.

#### **High Beam Assist Setting**

The driver can activate HBA by placing the START/STOP button to the ON position and by selecting: 'User Settings → Lights → HBA (High Beam Assist)'. If you disable this setting, HBA will not work.

The setting of HBA will be maintained, as selected, when the vehicle is re-started.



#### WARNING

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

#### **High Beam Assist operation**

- 1. Place the light switch in the AUTO position.
- 2. Turn on the high beam by pushing the lever away from you.
- 3. High Beam Assist (♣D) indicator will illuminate.
- 4. High Beam Assist will turn on when vehicle speed is above 25 mph (40 km/h).
  - If the light switch is pushed away when High Beam Assist is operating, High Beam Assist will turn off and the high beam will be on continuously.
  - 2) If the light switch is pulled towards you when the high beam is off, the high beam will turn on without High Beam Assist canceled. When you let go of the light switch, the lever will move to the middle and the high beam will turn off.
  - 3) If the light switch is pulled towards you when the high beam is on by High Beam Assist, the low beam will be on and High Beam Assist will turn off.
  - If the light switch is placed to the headlight position, High Beam Assist will turn off and the low beam will be on continuously.

When High Beam Assist is operating, the high beam switches to low beam in the following conditions.

- When the headlight of an on-coming vehicle is detected.
- When the tail lamp of a vehicle in front is detected.
- When headlight/tail lamp of bicycle/ motorcycle is detected.
- When the surroundings are bright enough high beams are not needed.
- When street lights or other lights are detected.
- When the light switch is not in the AUTO position.
- When High Beam Assist is off.
- When vehicle speed is below 15 mph (25 km/h).

## **High Beam Assist Malfunction** and Limitations

#### High Beam Assist malfunction



When High Beam Assist is not working properly, the warning message will come on for a few seconds. After the message disappears, the master warning light (1) will illuminate.

Take your vehicle to an authorized HYUNDAI dealer and have the function checked.

#### Limitations of the High Beam Assist

High Beam Assist may not work properly in the following situations:

- Light from a vehicle is not detected because of lamp damage, or because it is hidden from sight, etc.
- Headlight of a vehicle is covered with dust, snow or water.
- A vehicle's headlights are off but the fog lamps 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 a vehicle is not detected because of exhaust fume, smoke, fog, snow, etc.

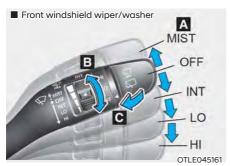
For more details on the limitations of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA)" section in chapter 7.

### 1 w

#### WARNING

- At times, High Beam Assist may not work properly. 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.

#### **WIPERS AND WASHERS**





- A. Wiper speed control
  - MIST Single wipe
  - · OFF Off
  - INT Intermittent wipe
     AUTO\* Auto control wipe
  - LO- Low wiper speed
  - HI High wiper speed
- B. Auto control wipe time adjustment
- C. Wash with brief wipes (front) (pull lever towards you)
- D. Rear wiper control\*
  - HI High wiper speed
  - LO Low wiper speed
  - OFF Off
- E. Wash with brief wipes (rear) (push lever away from you)
- \*: if equipped

#### **Front Windshield Wipers**

Operate as follows when the START/STOP button is in the ON position.

MIST: For a single wiping cycle, move the lever down (\subseteq) or up (MIST) and release it. The wipers will operate continuously if the lever is held in this position.

OFF: Wiper is not in operation.

INT: Wipers operate intermittently at the same wiping intervals. Use this mode in light rain or mist. To vary the speed setting, turn the speed control knob.

AUTO: The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The more it rains, the faster the wiper operates. When the rain stops, the wiper stops. To vary the speed setting, turn the speed control knob (B).

LO: Normal wiper speed HI: Fast wiper speed

## *i* 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) control (if equipped)



The rain sensor located on the upper end of the windshield glass senses the amount of rainfall and controls the wiping cycle for the proper interval. The wiper operation time will be automatically controlled depends on rainfall.

When the rain stops, the wiper stops. To vary the sensitivity setting, turn the sensitivity control knob (1).

If the wiper switch is set in AUTO mode when the START/STOP button is in the ON position, the wiper will operate once to perform a self-check of the system.

Set the wiper to OFF position when the wiper is not in use.

## **⚠** WARNING

To avoid personal injury from the windshield wipers, when the vehicle 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.
- Set the wiper switch to the OFF position when the wiper is not in use.

#### NOTICE

- When washing the vehicle, set the wiper switch in the O (OFF) position to stop the auto wiper operation. The the switch is set in the AUTO mode while washing the vehicle.
- Do not remove the sensor cover located on the upper end of the passenger side windshield glass.
   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 made by stone and dust while driving.

#### **Front Windshield Washers**



In the OFF (O) 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 prevent the washer fluid from freezing on the windshield and obscuring your vision which could result in an accident and serious injury or death.



#### ! CAUTION

- 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 antifreezing washer fluids in the winter season or cold weather.

## Rear Window Wiper and Washer Switch (if equipped)



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



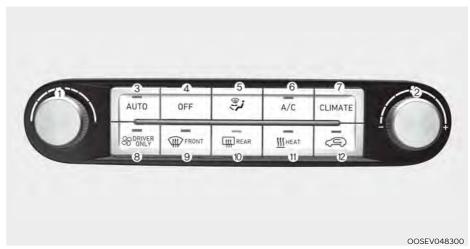
Push the lever away from you to spray rear washer fluid and to run the rear wiper 1~3 cycles. The spray and wiper operation will continue until you release the lever.

#### Auto rear wiper (if equipped)

The rear wiper will operate while the vehicle is in reverse with the front wipers ON by selecting the function on the LCD display.

Go to 'User Settings  $\rightarrow$  Convenience  $\rightarrow$  Auto Rear Wiper (reverse)'.

### **AUTOMATIC CLIMATE CONTROL SYSTEM (IF EQUIPPED)**



- 1. Temperature control knob
- 2. Fan speed control knob
- 3. AUTO (automatic control) button
- 4. OFF button
- 5. Mode selection button
- 6. Air conditioning button
- 7. Climate control information screen selection

- 8. Driver only button
- 9. Front windshield defroster button
- 10. Rear window defroster button
- 11. HEAT button
- 12. Air intake control button

## Automatic Heating and Air Conditioning

The Automatic Climate Control System is controlled by setting the desired temperature.



#### Press the AUTO button. (3)

The modes, fan speeds, air intake and air-conditioning will be controlled automatically by the temperature setting you select.



Turn the temperature control knob to the desired temperature. If the temperature is set to the lowest setting (17 °C), the air conditioning system will operate continuously. After the interior has cooled sufficiently, adjust the knob to a higher temperature set point whenever possible.

## *i* Information

- To turn the automatic operation off, select any button of the following:
  - Mode selection button
  - Air conditioning 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
  - HEAT button
  - Air intake control button (The previous state will maintain, even if the air intake control button is pressed.)

The selected function will be controlled manually while other functions operate automatically.

 For your convenience, use the AUTO button and set the temperature to 22°C (72°F).



## *i* Information

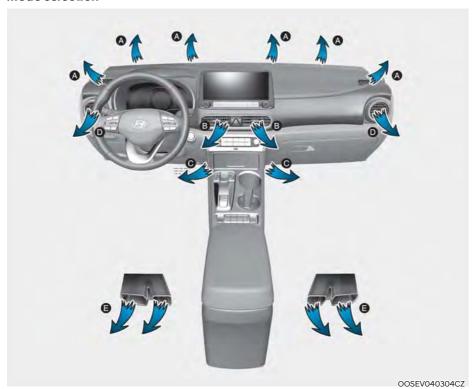
Never place anything near the sensor to ensure better control of the heating and cooling system.

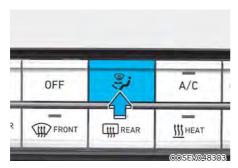
## Manual Heating and Air Conditioning

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.
- Set the mode to the desired position. For improving the effectiveness of heating and cooling, select:
  - Heating: 🎝 🕹
  - Cooling: نرح
- 3. Set the temperature control to the desired position.
- 4. Set the air intake control to the outside (fresh) air 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.

#### Mode selection





The mode selection button controls the direction of the air flow through the ventilation system.

The air flow outlet port is converted as follows:



Face-Level (B, D)

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)

Air flow is directed towards the face and the floor.



Floor-Level (A, C, D, E)

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.



Floor-Level (A, C, D, E)

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.



Max Defrost-Level (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 outlet vents can be opened or closed ( $\otimes$ ) using the vent control lever.

Also, you can adjust the direction of air delivery from these vents using the vent control lever as shown.

#### Temperature control



The temperature will increase by turning the knob to the right. The temperature will decrease by turning the knob to the left.

The temperature will increase or decrease by 0.5°C (1°F) for each incremental location. When set to the lowest temperature setting, the air conditioning will operate continuously

#### **Temperature conversion**

If the battery has been discharged or disconnected, the temperature mode display will reset to Fahrenheit.

To change the temperature unit from °C to °F or °F to °C:

- Automatic climate control system Press the AUTO button for 3 seconds while pressing the OFF button.
- Instrument cluster Go to User settings 'Units → Temperature Unit'.

The temperature unit on both the cluster LCD display and the climate control screen will change.

#### Air intake control



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

Using the system primarily in Fresh mode and Recirculation mode only when needed is recommended for best results.

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.

## **MARNING**

- 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



The fan speed can be set to the desired speed by turning the fan speed control knob.

More air is delivered with higher fan speeds.

Pressing the OFF button turns off the fan.



For better sound quality, fan speed may automatically slow down for a couple of minutes when you activate voice recognition or hands free.

#### NOTICE

Operating the fan speed when the START/STOP button is in the ON position could cause the battery to discharge. Operate the fan speed when the vehicle is in the ready () mode.

#### **Driver only**



If you press the DRIVER ONLY button (\$\mathbb{G}^{DRIVER}\$) and the indicator light illuminates, cold air mostly blows in the direction of the driver's seat. However, some of the cold air may come 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 will be reduced.

DRIVER ONLY button will be turned off under the following conditions:

- 1) Defrost on
- 2) DRIVER ONLY button re-push

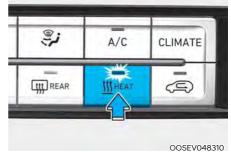
#### Air conditioning



A/C button will turn on (indicator light will illuminate) when the climate control system is controlled automatically (AUTO turned on) and the temperature is set to cool.

Push the button to turn the air conditioning system off.

#### **HEAT** button



HEAT button will turn on (indicator light will illuminate) when the climate control system is controlled automatically (AUTO turned on) and the temperature is set to warm.

Push the button to turn the heater off.

The air conditioner and heater uses energy from the battery. If you use the heater or air conditioner for too long, distance to empty can be reduced due to too much power consumption.

Turn off the heater and air conditioner if you do not need them.

## Climate control information screen selection button



Push the climate control information screen selection button to display climate control information on the audio or AVN screen.

#### OFF mode



OOSEV048311

Push the OFF button to turn the climate control system off. However, you can still operate the mode and air intake buttons as long as the START/STOP button is in the ON position.

#### **System Operation**

#### Ventilation

- 1. Set the mode to the ( ) position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Set the temperature control to the desired position.
- 4. Set the fan speed control to the desired speed.

#### Heating

- 1. Set the mode to the (پرپ) position.
- 2. Set the air intake control to the outside (fresh) air position.
- 3. Set the temperature control to the desired position.
- 4. Set the fan speed control to the desired speed.
- 5. If dehumidified heating is desired, turn the air conditioning system on.
- If the windshield fogs up, set the mode to the Floor & Defrost ( ) or Press the Front Defrost ( ) mode.

#### **Operation Tips**

- To keep dust or unpleasant fumes from entering the vehicle through the ventilation system, temporarily set the air intake control to the recirculated air position. Be sure to return the control to the fresh air position when the irritation has passed to keep fresh air in the vehicle. This will help keep the driver alert and comfortable.
- To prevent interior fog on the windshield, set the air intake control to the fresh air position and fan speed to the desired position, turn on the air conditioning system, and adjust the temperature control to the desired temperature.

#### Air conditioning

HYUNDAI Air Conditioning Systems are filled with R-134a or R-1234yf refrigerant.

 Start the vehicle. Push the air conditioning button.

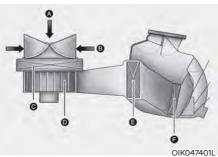
Set the mode to the ( ) position.

- 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.
- Adjust the fan speed control and temperature control to maintain maximum comfort.

Air conditioning system operation tips

- If the vehicle has been parked in direct sunlight during hot weather, open the windows for a short time to let the hot air inside the vehicle escape.
- After sufficient cooling has been achieved, switch back from the recirculated air to the fresh outside air position.
- To help reduce moisture inside of the windows on rainy or humid days, decrease the humidity inside the vehicle by operating the air conditioning system with the windows and sunroof closed.
- Use the air conditioning system every month for a few minutes to ensure maximum system performance.
- If you operate the air conditioner excessively, the difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, causing loss of visibility. In this case, set the mode selection button to the (قرة ) position and set the fan speed control knob to the lowest speed setting.

#### System Maintenance Climate control air filter



[A] : Outside air, [B] : Recirculated air [C] : Climate control air filter, [D] : Blower [E] : Evaporator core, [F] : PTC heater

This 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 climate control 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, more frequent climate control filter inspections and changes are required.

If the air flow rate suddenly decreases, the system should be checked at an authorized HYUNDAI dealer.

### Information

- Replace the filter according to the Maintenance Schedule.
   If the car is being driven in severe conditions such as dusty, rough roads, more frequent climate control air filter inspections and changes are required
- When the air flow rate suddenly decreases, have the system checked by 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 system 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) should never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators should be certified (and labeled) as meeting SAE Standard J2842.

## **MARNING**

Vehicles equipped with R-1234yf



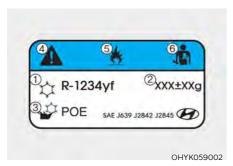
Since the refrigerant is mildly flammable and operated at high pressure, the air conditioning system should only be serviced by trained and certified technicians. It is important that the correct type and amount of oil and refrigerant are used.



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.



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

#### WINDSHIELD DEFROSTING AND DEFOGGING

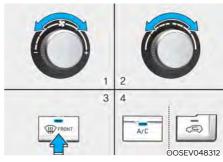
### ! WARNING

#### 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. In this case, set the mode selection knob or button to the (نر ) position and fan speed control knob or button to lower speed.

- · For maximum windshield defrosting, set the temperature control knob to the highest temperature setting and the fan control knob to the highest fan speed. Select the front defrost button on the climate control display.
- 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, outside 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 inside of the windshield.

#### To Defog Inside Windshield



- 1. Select any fan speed except "0" position.
- 2. Select the desired temperature.
- 3. Select the ( ) position.
- 4. The outside (fresh) air will be selected automatically.

Check to make sure the air intake control is in Fresh mode. If the air intake control indicator light is illuminated, press the button once to enable Fresh mode (indicator light OFF).

If the ( ) position is selected, the fan speed is automatically increased.

#### **To Defrost Outside Windshield**



- Set the fan speed to the highest (extreme right) position.
- 2. Set the temperature to the extreme hot position.
- 3. Select the ( ) position.
- The outside (fresh) air and air conditioning (if equipped) will be selected automatically.

Check to make sure the air intake control is in Fresh mode. If the air intake control indicator light is illuminated, press the button once to enable Fresh mode (indicator light OFF).

If the ( ) position is selected, the fan speed is automatically increased.

### **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 (﴿﴿﴿﴾) position. To cancel or return the defogging logic, do the following.

- 1. Turn the START/STOP button to the ON position.
- 2. Press the defroster button (\(\pi\)).
- While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The air intake control button indicator will blink 3 times. It indicates that the defogging logic is canceled.

If the battery has been discharged or disconnected, it resets to the defog logic status.

#### Auto Defogging System (only for automatic climate control system, if equipped)



Auto defogging reduces the possibility of fogging up the inside of the windshield by automatically sensing the moisture on inside the windshield.

The auto defogging system operates when the heater or air conditioning is on.



When the Auto Defogging System operates, the 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 air intake control will change to Fresh mode.

Step 2) The mode will be changed to defrost direct airflow to the windshield.

Step 3) The A/C button will turn ON.

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 the auto defogging system

- 1. Press the START/STOP button to the ON position.
- 2. Press the front defroster button over 3 seconds.
- The front defroster button indicator will blink 3 times and then ADS OFF will illuminate on the climate control information screen when the auto defogging system is canceled.

To reactivate the auto defogging system

- 1. Press the START/STOP button to the ON position.
- 2. Press the front defroster button over 3 seconds.
- 3. The front defroster button indicator will blink 6 times and then ADS OFF will go out on the climate control information screen when the auto defogging system is reactivated

## *i* 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 knob, the temperature adjustment knob, and the air intake control button are all disabled.

#### NOTICE

Do not remove the sensor cover located on the top of the windshield glass.

Damage to system parts could occur and may not be covered by your vehicle warranty.

#### **Defroster**

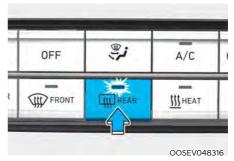
#### NOTICE

To prevent damage to the conductors 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 "Windshield Defrosting and Defogging" in this chapter.

#### **Rear Window Defroster**



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 facia switch 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.

### *i* 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 START/STOP button is in the OFF position.

#### **CLIMATE CONTROL ADDITIONAL FEATURES**

#### **Cluster Ionizer (if equipped)**

When the START/STOP button is in the ON position, the clean air function turns on automatically.

Also, the clean air function turns off automatically, when the START/STOP button is in the OFF position.

## Automatic Ventilation (if equipped)

To increase cabin air quality and reduce windscreen misting, air recirculation mode switches off automatically after 5 minutes, depending on outside temperature, A/C state, air direction mode, and the air intake will change to outside (fresh) mode.

#### To cancel or reactivate the Automatic Ventilation

When the air conditioning system is on, select Face level mode ( نزت ) and set the air intake control to the outside (fresh) air position. Then, while pressing the A/C button, press air recirculation mode button five times within 3 seconds.

When the automatic ventilation is set, the air recirculation indicator will blink 6 times. When canceled, the indicator will blink 3 times.

### 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**



#### To open:

Grab and hold the latch (1) on the arm rest then lift the lid.

### **Glove Box**



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.

### **Sunglasses Holder (if equipped)**



### To open:

Press the cover and the holder will slowly open. Place your sunglasses in the compartment door with the lenses facing out.

To close:

Push back into position.

Make sure the sunglasses holder is closed while driving.

### **MARNING**

- Do not keep objects except sunglasses inside the sunglasses holder. Such objects can be thrown from the holder in the event of a sudden stop or an accident, possibly injuring the passengers in the vehicle.
- Do not open the sunglass holder while the vehicle is moving. The side view mirror of the vehicle can be blocked by an open sunglass holder.
- Do not attempt to force sunglasses into the sunglass holder. If the sunglasses become jammed and you try to open it forcibly, personal injury may occur.

### **Luggage Tray (if equipped)**



You can place a first aid kit, a reflector triangle (front tray), tools, etc. in the box for easy access.

• Grasp the handle on the top of the cover and lift it.

### To increase luggage space





- Grasp the handle on the top of the cover and pull out the luggage tray board backwards.
- 2. Pull out the luggage tray board completely and remove the luggage tray.(If the luggage tray is equipped.)
- 3. Push the luggage tray board forwards into the lower sliding slot.

#### **INTERIOR FEATURES**

### **Cup Holder**

#### **Front**



Cups or small beverages cups may be placed in the cup holders.

#### Rear



Pull the armrest down to use the cup holders.

### **MARNING**

- 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.

### A

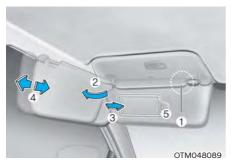
### ! WARNING

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 dry the cup holder at high temperature. This may damage the interior.

### **Sunvisor**



To use a sunvisor, pull it downward.

To use a sunvisor for a side window, pull it downward, unsnap it from the bracket (1) and swing it to the side (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 (if equipped).

Use the ticket holder (5) to hold tickets. Close the vanity mirror cover securely and return the sunvisor to its original position after use.

### *i* Information

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 (if equipped)**



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 (Watt) 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(Watt) 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.

### **USB Charger (if equipped)**



The USB charger is designed to recharge batteries of small size electrical devices using a USB cable.

The electrical devices can be recharged when the START/STOP button is in the ACC, ON or START position.

The battery charging state may be monitored on the electrical device. Disconnect the USB cable from the USB port after use.

- A smart phone or a tablet PC may get warmer during the re-charging process. It does not indicate any malfunction with the charging system.
- A smart phone or a tablet PC, which adopts a different re-charging method, may not be properly re-charged. In this case, use an exclusive charger of your device.
- The charging terminal is only to recharge a device. Do not use the charging terminal either to turn ON an audio or to play media on the AVN.

# Wireless Cellular Phone Charging System (if equipped)



[A]: Indicator light, [B]: Charging pad

There is a wireless cellular phone charger inside the front console.

The system is available when all doors are closed, and when the START/STOP button is in the ON position (1).

After use, to close the cover, slightly pull down the cover.

The system is available when all doors are closed, and when the START/STOP button is in the ON or START position.

### To charge a cellular phone

The wireless cellular phone charging system charges only the Qi-enabled cellular phones (**q**i). 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.

- 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 charging pad.
- 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 User Settings mode on the instrument cluster. For further information, refer to the "User setting mode" in chapter 4.

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 wirelessly charge your cellular phone again.

The system warns you with a message on the LCD display if the cellular phone is still on the wireless charging unit after the vehicle is turned OFF and the front door is opened.

 High speed wireless charging can be activated only when the cellular phones equipped with a wireless charging function is on the charging pad.

### *i* Information

For some manufacturers' 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 smart phone charging system may not support certain smart phones, which are not verified for the Qi specification (Qi).
- When placing your smart phone on the charging pad, position the phone in the middle of the mat for optimal charging performance. If your smart phone is off to the side, the charging rate may be less and in some cases the smart 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 smart phones, the charging indicator may not change to blue when the smart phone is fully charged.
- The wireless charging process may temporarily stop, when temperature abnormally increases inside the wireless smart phone charging system. The wireless charging process restarts, when 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 smart phone charging system and smart phone.
- When charging some smart phones with a self-protection feature, the wireless charging speed may decrease and the wireless charging may stop.
- If the smart phone has a thick cover, the wireless charging may not be possible.
- If the smart 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 smart phone during the charging process.
- When any smart 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 smart phone in any way.

### *i* Information

If the START/STOP button is in the OFF position, the charging also stops.

### *i* 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

#### Clock



### **WARNING**

Do not adjust the clock while driving. You may lose your steering control and cause severe personal injury or accidents.

### Vehicles with Audio system

Select the Setting menu on the audio system  $\rightarrow$  Select [Date/Time].

- Set time: Set the time displayed on the audio screen.
- Time format: Choose between 12-hour and 24-hour time formats.

### Vehicles with Navigation system

Select the Settings menu on the **AVN** screen  $\rightarrow$  Select [Date/Time].

- GPS time: Displays time according to the received GNSS time.
- 24-hour: Switches to 12 hour or 24 hour.

For more details, please refer to the separate manual that was supplied with your vehicle.

### **Clothes Hanger (if equipped)**



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) (if equipped)



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.

### **MARNING**

The following must be observed when installing ANY floor mat to the vehicle.

- Ensure to remove a protective film attached on the carpet before attaching a floor mat on the front floor carpet. Otherwise, the floor mat may move freely on the protective film and it could result in unintentional braking or accelerating.
- 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 (for example, 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)



To keep items from shifting in the luggage compartment, you can use the four holders located in the luggage compartment, to attach the luggage net. If necessary, contact your authorized HYUNDAI dealer to obtain a luggage net.



### CAUTION

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.



### WARNING

To avoid eye injury, DO NOT overstretch 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.

### **Cargo Area Cover (if equipped)**



Use the cover to hide items stored in the cargo area.

The cargo area cover will lift when the liftgate is opened.

Disconnect the strap (1) from the holder if you want to return the cover to the original position. To remove the cargo area cover completely, lift the cover to a 50-degree angle and pull it out (2).

### NOTICE

Since the cargo area cover may be damaged or deformed, do not put luggage on it when it is being used.



### WARNING

- Do not place objects on the cargo area cover while driving. 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 balance of the vehicle and locate the weight as far forward as possible.

#### **INFOTAINMENT SYSTEM**

### *i* 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 and iPod® Port**

You can use a USB port to plug in an USB and an iPod® port.





To use the USB and iPod®, open the front console cover by slightly pressing the lower part of the cover (1).

After use, to close the cover, slightly pull down the cover.

### *i* 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.

\* iPod® is a trademark of Apple Inc.

#### **Antenna**

#### Roof antenna



The roof antenna receives data transmitted from base stations and satellites (for example, AM/FM, DAB, GPS).

### **Steering Wheel Audio Controls**



The steering wheel audio control switches are installed for your convenience.

### NOTICE

Do not operate audio remote control buttons simultaneously.

### **VOLUME** ( + / - ) (1)

- Move the VOLUME toggle switch up to increase volume.
- Move the VOLUME toggle switch down to decrease volume.

### SEEK/PRESET ( $\wedge$ / $\setminus$ / ) (2)

If the SEEK/PRESET toggle switch is moved up or down and held for 0.8 seconds or more, it will function in the following modes.

#### RADIO mode

It will function as the AUTO SEEK select switch. It will SEEK until you release the switch.

#### **MEDIA** mode

It will function as the FF/REW switch.

If the SEEK/PRESET toggle switch is moved up or down, it will function in the following modes.

### RADIO mode

It will function as the PRESET STATION UP/DOWN switch.

#### **MEDIA** mode

It will function as the TRACK UP/ DOWN switch.

### MODE ( ( ) (3)

Press the MODE button to select Radio, Disc, or AUX.

### MUTE ( 14) (4)

- Press the button to mute the sound.
- Press the button again to activate the sound.



Detailed information is described in a separately supplied manual.

# **Bluetooth®** Wireless Technology Hands-free





You can use the phone wirelessly by using the *Bluetooth*\* Wireless Technology.

- (1) Call / Answer button
- (2) Call end button
- (3) Microphone (RHD vehicle : Right side)
- AVN: Detailed information for the Bluetooth® Wireless Technology hands-free is described in the manual supplied separately.

### **Voice Recognition**



You can operate the voice recognition function through voice commands.

For detailed information, refer to the separately supplied infotainment system manual.

### Audio / Video / Navigation System (AVN) (if equipped)

Detailed information for the AVN system is described in a separately supplied manual.

# **6.Driving Your Vehicle**

Before Entering the Vehicle  Before Starting	6-3
Start/Stop Button	6-5
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Smart Recuperation System (if equipped with Smart Cruise Control system)  System Setting	
Braking System Power Brakes Disc Brakes Wear Indicator Electronic Parking Brake (EPB) Auto Hold Brake Disc Cleaning Anti-lock Brake System (ABS) Electronic Stability Control (ESC) Vehicle Stability Management (VSM) Hill-Start Assist Control (HAC) Good Braking Practices	
Drive Mode Integrated Control System	

#### **BEFORE DRIVING**



### ! WARNING

### CALIFORNIA PROPOSITION 65 WARNING

Engine exhaust and 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 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 seat belt. Check that all passengers have fastened their seat belt.
- Check the gauges and indicators in the instrument panel and the messages on the instrument display when the START/STOP 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 3.
- 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

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.

### **START/STOP BUTTON**

### **MARNING**

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 START/STOP button or related parts. Unexpected and sudden vehicle movement can occur.
- NEVER reach through the steering wheel for the START/STOP 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.



Whenever the front door is opened, the START/STOP 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 START/STOP button for more than two seconds OR Rapidly press and release the START/STOP 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 START/STOP button with the gear in the N (Neutral) position.

### **MARNING**

- NEVER turn the START/STOP button to the LOCK or ACC position 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 START/STOP button to the OFF position, and take the Smart Key with you. Unexpected vehicle movement may occur if these precautions are not followed.

### **START/STOP Button Positions**

<b>Button Position</b>	Action	Notice
OFF START STOP	To turn off the vehicle, press the START/STOP button with the gear in P (Park). Also, the vehicle will turn off when the START/STOP 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 START/STOP button will go to the ACC position. The steering wheel locks to protect the vehicle from theft	If the steering wheel is not locked properly when you open the driver's door, the warning chime will sound.
ACC START STOP	Press the START/STOP button when the button is in the OFF position without depressing the brake pedal. Some of the electrical accessories are usable.  The steering wheel unlocks.	If the steering wheel doesn't unlock properly, the START/STOP button will not work. Press the START/STOP button while turning the steering wheel right and left to release tension.
ON START STOP	Press the START/STOP button while it is in the ACC position without depressing the brake pedal. The warning lights can be checked before the vehicle is started.	Do not leave the START/STOP button in the ON position when the vehicle is not in the ready ( ) mode to prevent the battery from discharging
START START STOP	To start the vehicle, depress the brake pedal and press the START/STOP button with the gear in the P (Park) position.	If you press the START/STOP button without depressing the brake pedal, the vehicle does not start and the START/STOP button changes as follows:  OFF →ACC → ON → OFF or ACC

### **Starting the Vehicle**

### **MARNING**

- 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, accelerator and clutch pedals.
- Do not start the vehicle with the accelerator pedal depressed. The vehicle can move which can lead to an accident.

### *i* Information

- The vehicle will start by pressing the START/STOP 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 START/STOP 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 START/STOP button. If the vehicle starts, the " indicator will come on.

### Information

- Always start the vehicle with your foot on the brake pedal. Do not depress the accelerator while starting the vehicle.
- 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. If traffic and road conditions permit, you may shift to the N (Neutral) position while the vehicle is still moving and press the START/STOP button in an attempt to restart the vehicle.
- Do not push or tow your vehicle to start the vehicle.

### NOTICE

To prevent damage to the vehicle:

Do not press the START/STOP button for more than 10 seconds except when the stop lamp fuse is blown.

When the stop lamp fuse is blown, you can't start the vehicle normally. 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 START/STOP button for 10 seconds with the START/STOP button in the ACC position.

For your safety always depress the brake 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 START/STOP 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 START/STOP button to turn the vehicle off.
- 5. Make sure the "=" indicator light on the instrument cluster is turned off.



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 START/ STOP button in the OFF position. Unexpected and sudden vehicle movement can occur if these precautions are not followed.



Select gear positions by pressing the shift button.

For your safety, always depress the brake pedal while shifting to another gear.



### WARNING

The reduction gear button or interior parts might get hot when a vehicle is parked outside during hot weather. Always be careful when the vehicle is hot.

### Gear position



The indicator in the instrument cluster displays the gear position when the START/STOP 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).

With the vehicle on, the gear automatically shifts to P (Park) if you open the driver's door when the gear is in N (Neutral), R (Reverse) or D (Drive) and the following conditions are met:

- The brake/accelerator pedal is not depressed
- Seat belt is unfastened
- The vehicle speed is below 0.4 mph (0.6 km/h)

When the vehicle is over a certain speed, the gear does not shift to P (Park) when the P button is pressed.

### A

### 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 START/STOP button will be in the ACC position.

To turn off the vehicle from the ACC position, press the POWER button to the ON position, press the [P] button, and press the START/STOP button to the OFF position.

When the driver's door is opened within 3 minutes with the START/STOP 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), from R (Reverse) into D (Drive) or from D (Drive) into R (Reverse):

- 1. Depress and hold the brake pedal.
- 2. Start the vehicle or place the START/ STOP button in the ON position.
- 3. Press the R (Reverse) or D (Drive) button.

### *i* Information

For your safety, you cannot shift the gear while the charging cable is connected.

### 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 8) 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 START/ STOP button in the OFF position. Take the Key with you when exiting the vehicle.

### LCD Display Messages Shifting conditions not met



The message appears on the LCD display in the following conditions:

- When driving speed is too fast to shift the gear.
   Decrease the vehicle speed or slow
- down before shifting the gear.

  2. When the gear is shifted while the

vehicle is in utility mode.

### Press brake pedal to change gear



ne I CD

The message appears on the LCD 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



The message appears on the LCD display when the gear is shifted to P (Park) while the vehicle is moving.

Stop the vehicle before shifting to P (Park).

### NEUTRAL engaged



The message appears on the LCD display when the N (Neutral) position is engaged.

### PARK engaged



The message appears on the LCD display when the P (Park) position is engaged.

### This gear is already selected



The message appears on the LCD display when the selected gear button is pressed again.

## PARK button error! Engage parking brake when parking vehicle



The message is displayed when there is a problem with function engaging P (Park) position.

Immediately have the vehicle inspected by an authorized HYUNDAI dealer.

### D button error! Shifting back to D not possible if gear changed or vehicle Off



The message is displayed when there is a problem with the D button.

If this message is displayed, do not shift the gear or turn the vehicle off while driving. If the driver shifts the gear to P/R/N position or turns off the vehicle, it is impossible to shift back to D (Drive).

#### Check P button



The message appears on the LCD display when there is problem with the P button. Immediately have the vehicle inspected by an authorized HYUNDAI dealer.

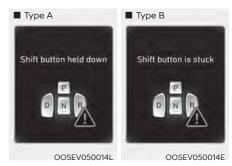
### Check shift controls



The message appears on the LCD display when there is problem with the shift buttons.

Immediately have the vehicle inspected by an authorized HYUNDAI dealer

### Shift button held down/Shift button is stuck



The message appears on the LCD 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

### **Good Driving Practices**

- Never move the shift lever from P (Park) or N (Neutral) to any other position with the accelerator pedal depressed.
- Never move the shift lever into 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 move the shift lever to N (Neutral) when driving. Doing so may result in an accident.
- Driving uphill or downhill, always shift to D (Drive) when driving forward or to R (Reverse) when driving backwards, and check the gear position indicated on the cluster before driving. If you drive in the opposite direction of the selected gear, the vehicle will turn off and a serious accident might be occurred due to the degraded brake performance.
- Do not drive with your foot resting on the brake pedal. Even light, but consistent pedal pressure can result in the brakes overheating, brake wear and possibly even brake failure.
- Always apply the parking brake when leaving the vehicle. Do not depend on placing the transmission in P (Park) to keep the vehicle from moving.
- Exercise extreme caution when driving on a slippery surface. Be especially careful when braking, accelerating or shifting gears. On a slippery surface, an abrupt change in vehicle speed can cause the drive wheels to lose traction and may cause loss of vehicle control resulting in an accident
- Optimum vehicle performance and economy is obtained by smoothly depressing and releasing the accelerator.

### **MARNING**

### To reduce the risk of SERIOUS INJURY or DEATH:

- ALWAYS wear your seatbelt. 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.

### REGENERATIVE BRAKING SYSTEM

# Regenerative Braking (Paddle Shifter)



The paddle shifter is used to adjust the regenerative braking level 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 for more than 0.5 seconds and One Pedal Driving function is operated, increasing the regenerative braking. In this case, stopping the vehicle is possible by keep on pulling the paddle shifter.

## Refer to the following pages on "One Pedal Driving".

 With the Smart Recuperation System activated, pull and hold the right side paddle shifter for over 1 second to turn on and off the automatic change of the regenerative braking. However, nothing will happen if the Smart Recuperation System is not activated from the User Settings mode. To activate or deactivate the function go to 'User settings → Convenience → Smart recuperation'.

Refer to the following pages on "Smart Recuperation System".

### *i* Information

The paddle shifter does not operate when:

- The [ ] and [ ] paddle shifters are pulled at the same time.
- The vehicle is decelerating by depressing the brake pedal.
- The Cruise Control system or Smart Cruise Control system is activated.



OOSEV040491R

The selected regenerative braking level is displayed on the instrument cluster.

Initial setting of the regenerative braking level and adjustable range vary according to the selected Drive mode.

Drive mode	Initial setting	Adjustable Range
ECO+	2	0-3
ECO	2	0-3
COMFORT	1	0-3
SPORT	1	0-3

For more details, refer to "Drive Mode Integrated Control System" in this chapter.

### **One Pedal Driving**

The driver can stop the vehicle by pulling and holding the left side paddle shifter.

### **Operating Conditions**

The system enters the operating condition when the conditions below are met:

- · The driver's door is closed.
- · The driver's seat belt is fastened.

#### To operate:

- Pull and hold the left side paddle shifter while coasting.
- When the vehicle speed is above 1.8 mph (3 km/h), release the paddle shifter to return to the previously set level.
- When the vehicle speed is below 1.8 mph (3 km/h), the function maintains control to stop the vehicle even though the paddle shifter is released.
- While the One pedal driving is in activation, the driver can control the vehicle stopping position using the accelerator pedal.

### Automatic engagement of EPB

After the vehicle is stopped by the One Pedal Driving function, EPB is automatically engaged when any of these conditions occur:

- The driver's door is open.
- · The driver's seatbelt is unfastened.
- · The hood is open.
- The liftgate is open.
- 5 minutes have passed after the vehicle has stopped.
- The system operation is limited due to other reasons.



### WARNING

Stopping the vehicle may not be possible according to the vehicle and road conditions. Pay attention to the road condition ahead and apply the brake if necessary.

# SMART RECUPERATION SYSTEM (IF EQUIPPED WITH SMART CRUISE CONTROL SYSTEM)

The Smart Recuperation System controls the regenerative braking automatically according to the road gradient and driving condition of the vehicle in front. The system minimizes the unnecessary operation of the brake and acceleration pedal, improving the electric energy efficiency and assisting the driver.

### **System Setting**



The Smart Recuperation System enters the ready status when:

The gear is in P (Park) and select 'User settings  $\rightarrow$  ECO vehicle  $\rightarrow$  Smart recuperation' on the User Settings mode.

The setting is maintained when the vehicle is restarted.

### To Activate Smart Recuperation System

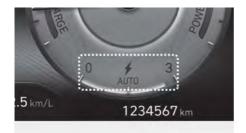
With 'AUTO' for the regenerative braking level displayed on the cluster, the regenerative braking level is controlled automatically when vehicle speed is above 6 mph (10 km/h) and one of the condition below is met.

- The road gradient changes
- Distance from the vehicle ahead reduces or increases
- Speed of the vehicle ahead reduces or increases



### WARNING

When vehicle speed is under 6 mph (10 km/h), the Smart Recuperation System is cancelled. The driver must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.



OOSEV040487L

When the system is turned on from the User Settings mode, but the front radar doesn't recognize the vehicle in front, 'AUTO' is displayed in white.



OOSEV040488L

If the front radar recognizes the vehicle in front, 'AUTO' is displayed in orange. The regenerative braking level is automatically controlled depending on the driving condition of the vehicle in front and the level is indicated with arrows.

However, current regenerative braking level is maintained if the driver depresses the brake pedal while the system is in activation. Also, the system is cancelled temporarily if the accelerator pedal is depressed.



### WARNING

The Smart Recuperation System which automatically controls the regenerative braking level when coasting is only a supplemental system for the driver's convenience. The system cannot completely stop the vehicle nor avoid all collisions. The brake control may be insufficient depending on the speed of the vehicle in front and when the vehicle in front suddenly stops, a vehicle cuts in suddenly and there is a steep slope. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.

# Smart Recuperation System will be Temporarily Cancelled When:

- · Cancelled manually
  - Pulling and holding the right side paddle shifter for more than 1 second. The Smart Recuperation System turns off temporarily and AUTO for the regenerative braking level disappears from the cluster.
- Cancelled automatically
  - The vehicle is shifted to N (Neutral), R (Reverse) or P (Park).
  - Cruise Control system (including Smart Cruise Control system) is in activation.
  - The ESC (Electronic Stability Control) or ABS is operating.

### **!** WARNING

When the Smart Recuperation System is cancelled automatically, adjust the vehicle speed directly by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

### To Resume Smart Recuperation System

To re-activate the Smart Recuperation System while driving, pull and hold the right side paddle shifter for more than 1 second again. Then, AUTO for the regenerative braking level will appear on the cluster.

### To Turn Smart Recuperation System Off

To turn off the system, shift to P (Park) and deselect 'User settings  $\rightarrow$  ECO vehicle  $\rightarrow$  Smart recuperation' on the User Settings mode.

# **Vehicle-to-Vehicle Distance Recognition Sensor (Front radar)**

In order for the Smart Recuperation System to operate properly, always make sure the radar sensor cover 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. In this case, the system operation may stop temporarily and not operate normally.



### 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. Have the vehicle inspected by an authorized HYUNDAI dealer.

- If the front bumper becomes damaged in the area around the radar sensor, the Smart Recuperation System may not operate properly. Have the vehicle inspected by an 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.

### **System Malfunction**



Check smart recuperation system

The message will appear when the system is not functioning normally. The system will be cancelled and the word 'AUTO' on the cluster will disappear and instead display regenerative braking level. Check for foreign substances on the front radar. Remove any dirt, snow, or foreign material that could interfere with the radar sensors. If the system still does not operate normally, take your vehicle to an authorized HYUNDAI dealer and have the system checked.

### **Limitations of the System**

The Smart Recuperation System may not operate properly in certain situations when the driving condition is beyond the performance of the front radar sensor. Driver's attention is required in such cases when the system does not react

properly or operate unintentionally.

#### On curves



When coasting on the curve, the system may not detect the vehicle in your lane and the regenerative braking level will reduce automatically, making you feel that the vehicle is accelerating.

Also, if the system suddenly recognizes the vehicle in front, the regenerative braking level will increase automatically, making you feel that the vehicle is decelerating.

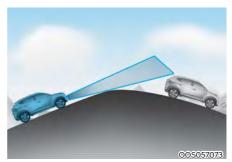
The driver must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



Your vehicle speed can be reduced due to a vehicle in the adjacent lane.

Apply the accelerator pedal and select the appropriate speed. Check to be sure that the road conditions permit safe operation of the Smart Recuperation System.

#### On inclines

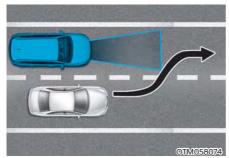


When coasting on an uphill or downhill, the system may not detect the vehicle in your lane and the regenerative braking level will reduce automatically, making you feel that the vehicle is accelerating.

Also, if the system suddenly recognizes the vehicle in front, the regenerative braking level will increase automatically, making you feel that the vehicle is decelerating.

The driver 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.

### Lane changing



- 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.

### Vehicle recognition



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 suddendecelerating vehicles
- Stopped vehicles (When the vehicle ahead drives away, the system may not detect a stopped vehicle.)
- 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.

### **MARNING**

When using the Smart Recuperation System take the following precautions:

- If an emergency stop is necessary, you must apply the brakes.
- 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.
- The Smart Recuperation System 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 changes may cause a delay in the system's reaction or may cause the system to react to a vehicle actually in an adjacent lane. Always drive cautiously to prevent unexpected and sudden situations from occurring.
- The Smart Recuperation System may not recognize complex driving situations so always pay attention to driving conditions and control your vehicle speed.

### NOTICE

The Smart Recuperation System may not operate temporarily due to:

- Electrical interference
- · Modifying the suspension
- Differences of tire abrasion or tire pressure
- · Installing different type of tires

### **BRAKING SYSTEM**

### **Power Brakes**

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

In the event of a vehicle power failure, the power assist for the brakes will not work. You can still stop your vehicle, but it will require greater force and increased pedal travel than normal. The stopping distance, however, will be longer than with power brakes.

### 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 a long or steep hill, shift to a lower gear and avoid continuous application of the brakes. 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 Brakes 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.



Always replace brake pads as complete front or rear axle sets.

### **Electronic Parking Brake (EPB)**

### Applying the parking brake



To apply EPB (Electronic Parking Brake):

- 1. Depress the brake pedal.
- 2. Pull up the EPB switch.

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 Auto Hold is OFF when the the vehicle is turned off, the EPB will not be applied.



### **WARNING**

To reduce the risk of SERIOUS INJURY or DEATH, do not operate the EPB while the vehicle is moving except in an emergency situation. It could damage the brake system and lead to an accident.

### Releasing the parking brake



To release EPB (Electronic Parking Brake):

- Place the START/STOP button in the ON position.
- Depress the brake pedal.
- Press the EPB switch.

Make sure the Parking Brake Warning Light goes off.

To release EPB (Electronic Parking Brake) automatically:

- Shift lever in P (Park)
   With the vehicle in the ready (
   mode, depress the brake pedal and shift out of P (Park) to R (Reverse) or D (Drive).
- Shift lever in 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).

- · Satisfy the following conditions
- Ensure seat belts are fastened and the doors, hood and liftgate are closed.
- With the vehicle in the ready ( )
  mode, depress the brake pedal and
  shift out of P (Park) to R (Reverse), D
  (Drive).
- Depress the ac.celerator pedal.
   Make sure the Parking Brake Warning Light goes off.

### *i* Information

- For your safety, you can engage EPB even though the START/STOP button is in the OFF position (only if battery power is available), 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 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.
- The driver turns the vehicle off while Auto Hold is operating.

### Warning messages



To release EPB, close the doors, hood and liftgate and fasten seatbelt

A warning will sound and a message will appear in the following conditions:

- · If you try to drive with the EPB applied.
- If the driver's seatbelt is not fastened, and you try to release EPB.
- If the driver's door is opened, and you try to release EPB.
- If the hood is opened with the gear in D (Drive) and you try to release EPB.
- If the liftgate is opened with the gear in R (Reverse) and you try to release EPB.
- If there is a problem with the vehicle.

### **MARNING**

- 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.



Deactivating AUTO HOLD... Press brake pedal

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.



Parking brake automatically applied If EPB is applied while Auto Hold is activated, a warning will sound and a message will appear.

### EPB malfunction warning light

This warning light illuminates if **EPB** the START/STOP button is set to the ON position and goes off in approximately 3 seconds if the system is operating normally.

If the EPB malfunction warning light remains on, comes on while driving, or does not come on when the START/ STOP button is set 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 warning light may illuminate when the ESC indicator comes on to indicate that ESC is not working properly, but it does not indicate a malfunction of 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, EPB may not be applied.
- If the parking brake warning light blinks when the EPB warning light is on, press the switch, and then pull it up. Repeat this one more time. 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 setting the **BRAKE** START/STOP button to the ON position ( findicator off).

This light will be illuminated when the parking brake is applied with the START/ STOP 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. However, braking distance will be longer than normal.



### ! WARNING

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 a severe accident.



### Information

During emergency braking, 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.

### To apply:



1. With the driver's door and liftgate 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.



- 2. When you stop the vehicle completely by depressing the brake pedal, the Auto Hold maintains the brake pressure to hold the vehicle stationary. The 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.

#### To release:

If you depress the accelerator pedal with the shift lever in D (Drive) or Manual shift mode, the Auto Hold will be released automatically and the vehicle will start to move. The AUTO HOLD indicator changes from green to white.



### **WARNING**

When the AUTO HOLD is automatically released by depressing the accelerator pedal, always take a look around your vehicle.

Slowly depress the accelerator pedal for a smooth start.

#### To cancel:



- 1. Depress the brake pedal.
- 2. Press the [AUTO HOLD] switch. The AUTO HOLD indicator will turn off.



### WARNING

To prevent, unexpected and sudden vehicle movement, ALWAYS press your foot on the brake pedal to cancel the Auto Hold before you:

- Drive downhill.
- Drive the vehicle in R (Reverse).
- Park the vehicle

### *i* Information

- · The Auto Hold does not operate when:
  - The driver's door is opened.
  - The hood is opened.
  - The shift lever is in P (Park) or R (Reverse).
  - EPB is applied.
- For your safety, the Auto Hold automatically switches to EPB when:
  - The driver's door is opened.
  - The 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 sound and a message will appear to inform you that EPB has been automatically engaged. Before driving off again, depress the brake pedal, check the surrounding area near your vehicle and release the parking brake manually with the EPB switch.

 While operating Auto Hold, you may hear mechanical noise. However, it is normal operating noise.

### NOTICE

If the AUTO HOLD indicator changes to yellow, the Auto Hold is not working properly. Contact an authorized HYUNDAI dealer.

### **MARNING**

- 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 or hood open detection system, the Auto Hold may not work properly.

Contact an authorized HYUNDAI dealer.

### Warning messages



Parking brake automatically applied When the EPB is applied from Auto Hold, a warning will sound and a message will appear.



Deactivating AUTO HOLD... Press brake pedal

When the conversion from Auto Hold to EPB is not working properly a warning will sound and a message will appear.

When this message is displayed, the Auto Hold and EPB may not operate. For your safety, depress the brake pedal.



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.



AUTO HOLD conditions not met. Close door, hood and liftgate

When you press the [AUTO HOLD] switch, if the driver's door and hood are not closed, a warning will sound and a message will appear on the cluster LCD display.

Press the [AUTO HOLD] switch after closing the driver's door and hood and liftgate.

# **Brake Disc Cleaning (If equipped)**

Use the Brake Disc Cleaning function if noise is generated when depressing the brake while driving or if the brake disc gets rusty. It helps reduce the noise and rust. Regenerative braking is restrained while Brake Disc Cleaning is operated, which may lower the electric energy efficiency.

Press and hold the AUTO HOLD button for over 3 seconds.

- Brake Disc Cleaning starts operating when the message 'Brake disc cleaning' is displayed on the instrument cluster.
- Regenerative braking is restrained while the brake is depressed approximately 10 times while driving (it may differ depending on driving conditions). It helps reduce the noise and rust.
- Brake Disc Cleaning function will turn
  off automatically when the operation
  is completed. It can also be turned
  off before operation is completed by
  turning off the vehicle or pressing
  the AUTO HOLD button for over 3
  seconds.

### **Anti-lock Brake System (ABS)**



### WARNING

Anti-Lock Braking System (ABS) or Electronic Stability Control (ESC) 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 vehicles 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. Drive your vehicle at reduced speeds during the above conditions.

The safety features of 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 to 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 depending on 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.

### ! WARNING

If the ABS warning light ((((iii))) 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, ABS will be active continuously and the ABS warning light ((B)) may illuminate.

Pull your vehicle 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 ((3)) 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 START/STOP button is in the ON position, ESC and the ESC OFF indicator lights illuminate for approximately three seconds and goes off, then ESC is turned on.

### When operating



When 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 ESC activates, the vehicle may not respond to the accelerator as it does under routine conditions.
- If Cruise Control was in use when ESC activates, Cruise Control automatically disengages. Cruise Control can be reengaged when the road conditions allow. See "Cruise Control System" later in this chapter 7. (if equipped)

#### **ESC OFF condition**



To cancel ESC operation:

• State 1



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 (braking management) still operates.

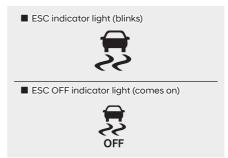
#### State 2



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 START/STOP button is placed in the LOCK/OFF position when ESC is off, ESC remains off. Upon restarting the vehicle, the ESC will automatically turn on again.

### Indicator lights



When the START/STOP button is in the ON position, the ESC indicator light illuminates, then goes off if ESC is operating normally.

The ESC indicator light blinks whenever 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 ESC is turned off with the button.



### WARNING

When ESC is blinking, this indicates ESC is active:

Drive slowly and NEVER attempt to accelerate. NEVER turn 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 ESC 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 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 ESC is turned off (ESC OFF light illuminated).

### *i* Information

Turning ESC off does not affect ABS or standard brake system operation.

## Vehicle Stability Management (VSM)

Vehicle Stability Management (VSM) is a function of the Electronic Stability Control (ESC). 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 Vehicle Stability Management (VSM):

- ALWAYS check the speed and the distance to the vehicle ahead. VSM is not a substitute for safe driving practices.
- Never drive too fast for the road conditions. VSM will not prevent accidents. Excessive speed in bad weather, on slippery and uneven roads can result in severe accidents.

### VSM operation

**VSM ON condition** 

VSM operates when:

- · Electronic Stability Control (ESC) is on.
- Vehicle speed is approximately under 93 mph (150 km/h) when the vehicle is braking on rough roads.

#### When operating

When you apply your brakes under conditions which may activate ESC, you may hear sounds from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your VSM is active.

### *i* Information

VSM does not operate when:

- Driving on a banked road such as gradient or incline.
- · Driving in reverse.
- · The ESC OFF indicator light is on.
- The EPS (Electric power steering) warning light (♠!) is on or blinks.

### **⚠** WARNING

If the ESC indicator light (景) or EPS warning light (♠!) stays illuminated or blinks, your vehicle may have a malfunction with VSM. 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 VSM 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)**

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 3 seconds and releases the brake after 3 seconds or when the accelerator pedal is depressed.

### A

### 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

- HAC does not operate when the shift lever is in P (Park) or N (Neutral).
- HAC activates even when ESC (Electronic Stability Control) is off.
   However, it does not activate, when 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. Move the shift lever into the P (Park) position, then apply the parking brake, and place the START/STOP button in the LOCK/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, taking care to keep the vehicle under control at all times. If the braking action does not return to normal, stop as soon as it is safe to do so. 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)**



The drive mode may be selected according to the driver's preference or road condition.

 The mode changes, as below, whenever the DRIVE MODE button is pressed.

COMFORT
<b>+</b>
SPORT
<del></del>
ECO

 Press and hold the DRIVE MODE button to select FCO+ mode.

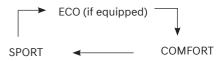
The system resets to be in the COMFORT mode (except if it is in ECO mode), when the vehicle is restarted.

When the vehicle is restarted, Drive Mode is set to ECO by default.

### *i* Information

If there is a problem with the instrument cluster, the drive mode will be in COMFORT mode and may not change to SPORT mode.

The mode changes, as below, whenever the DRIVE MODE button is pressed.



When COMFORT mode is selected, it is not displayed on the instrument cluster.

### **ECO** mode (if equipped)



When the Drive Mode is set to ECO mode, the motor and transmission control logic are changed to maximize energy efficiency.

- When the ECO mode is selected by pressing the DRIVE MODE button, the ECO indicator 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.
- Whenever the vehicle is restarted, the Drive Mode will change to ECO mode.

### *i* Information

Electric energy 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 shift pattern of the reduction gear may change.

The above situations are normal conditions when ECO mode is activated, to improve electric energy efficiency.

### **Initial Setting for Each Drive Mode**

Drive mode	COMFORT	SPORT ECO		ECO+ *1
Feature	Normal driving mode	Sporty driving mode	Optimal for eco- driving	Ultra power saving driving mode
Button activation	Press	Press	Press	Press and hold
Indicator on the cluster	-	SPORT	ECO	ECO+
Air conditioner/ heater system control	COMFORT (ECO/ COMFORT) *2	COMFORT (ECO/ COMFORT) *2	ECO	Off
Regenerative braking level	1 (1~3) *2	1 (1~3) *2	2 (1~3) *2	2

<sup>\*1:</sup> Change to ECO+ mode

- 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.
- \*2: It is possible to set the driving condition for each drive mode (except the ECO+ mode) at the drive mode setting in the Audio and AVN system. For more information, refer to the separately supplied manual.

### SPECIAL DRIVING CONDITIONS

### **Hazardous Driving Conditions**

When hazardous driving elements are encountered such as water, snow, ice, mud and sand, take the following precautions:

- Drive cautiously and maintain a longer braking distance.
- · Avoid abrupt braking or steering.
- When your vehicle is stuck in snow, mud, or sand, accelerate slowly to avoid unnecessary wheel spinning.
- Put sand, rock salt, tire chains or other non-slip materials under the wheels to provide additional traction while being 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 wear is in gear. Slowly spinning the wheels in forward and reverse directions causes a rocking motion that may free the vehicle.



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 a motor 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).

### *i* Information

The ESC system 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 8.

### **Smooth Cornering**

Avoid braking or gear changing in corners, 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 drivers' 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 replacement" in chapter 9.
- 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 replacement" in chapter 9.

### **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.



### WARNING

In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. Make sure all passengers are wearing their seat belts.

### 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:

### Information

Information for Snow Tires and Tire Chains in the national language (Bulgarian, Hungarian, Icelandic, Polish) is provided in the Appendix.

### **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 the paddle shifter (left side lever) to increase regenerative braking, but avoid adjusting it to level 3 (steering may be difficult). Sudden brake applications on snowy or icy roads may cause skids to occur.

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.



### Information

Do not install studded tires without first checking local and municipal regulations for possible restrictions against their use.

### Summer tires

- Summer tires are used to maximize the driving performance on dry roads.
- If the temperature is below 44°F (7°C) or you are driving on snowy or icy roads, the summer tires lose their brake performance and traction as the tire grip weakens significantly.
- If the temperature is below 44°F
  (7°C) or you are driving on snowy or
  icy roads, mount snow tires or allseason tires of the same size with your
  vehicle's standard tire for safe driving.
  Both snow and all-season tires have
  M+S markings.
- When using the M+S tires, use tires with the same tread produced by the same manufacturer for safe driving.
- When driving with the M+S tires with the lower maximum allowable speed than that of the vehicle's standard summer tire, be careful not to exceed the speed allowed for the M+S tires.

### Tire chains



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 snow chains must be used, use wire-type chains with a thickness of less than 0.47 inch (12 mm). 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.

### **MARNING**

The use of tire chains may adversely affect vehicle handling:

- Drive less than 20 mph (20 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 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 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 (0.5~10 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) wide to prevent damage to the chain's connection.

### **Winter Precautions**

### Check battery and cables

Winter temperatures affect battery performance. Inspect the battery and cables, as specified in the chapter 9. Have the system checked by an authorized HYUNDAI dealer or in a service station.

### Change to "winter weight" oil if necessary

In some regions during winter, it is recommended to use the "winter weight" oil with lower viscosity. For further information, refer to the chapter 2. When you are not sure about a type of winter weight oil, consult an authorized HYUNDAI dealer.

#### To prevent locks from freezing

To prevent the locks from being frozen, spray approved de-icing fluid or glycerin into key holes. When a lock opening is already covered with ice, spray approved de-icing fluid over the ice to remove it. When an internal part of a lock freezes, try to thaw it with a heated key. Carefully use the heated key to avoid an injury.

### Use approved window washer antifreeze solution in system

To prevent the window washer from being frozen, add authorized window washer anti-freeze solution, as specified on the window washer container. Window washer anti-freeze solution is available from an authorized HYUNDAI dealer, and most vehicle accessory outlets. Do not use coolant or other types of anti-freeze solution, to prevent any damage to the vehicle paint.

#### Do not let your parking brake freeze

Under some conditions your parking brake 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. When there is the risk that your parking brake may freeze, temporarily apply it with the shift lever in P (Park). Also, block the rear wheels in advance, so the vehicle may not 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 such conditions during the severe winter, you should check underneath the vehicle on a regular basis, to ensure that the front wheels and the steering components is unblocked.

#### Carry emergency equipment

In accordance with weather conditions, you should carry appropriate emergency equipment, while driving. Some of the items you may want to carry include tire chains, tow straps or chains, flashlight, emergency flares, sand, shovel, jumper cables, window scraper, gloves, ground cloth, coveralls, blanket, etc.

## Do not place objects or materials in the motor compartment

Putting objects or materials in the motor compartment may cause an vehicle failure or combustion, because they may block cooling the parts in the motor compartment. Such damage will not be covered by the manufacturer's warranty.

### **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 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.

### **Overloading**



### WARNING

The Gross Axle Weight Rating (GAWR) and the Gross Vehicle Weight Rating (GVWR) for your vehicle are on the Certification Label attached to the driver's (or front passenger's) door. Exceeding these ratings can cause an accident or vehicle damage. You can calculate the weight of your load by weighing the items (and people) before putting them in the vehicle. Be careful not to overload your vehicle.

### **The Loading Information Label**



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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

860 lbs. (390 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

- Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
- Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- 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.)
- 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.
- 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 break, 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 (1400 lbs.) (635 kg)		Passenger Weight (150 lbs. × 2 = 300 lbs.) (68 kg × 2 = 136 kg)		Cargo Weight (1100 lbs.) (499 kg)
Example 2	Vehicle Capacity	2	<b>* * * *</b>	+	
	Maximum Load (1400 lbs.) (635 kg)		Passenger Weight (150 lbs. × 5 = 750 lbs.) (68 kg × 5 = 340 kg)		Cargo Weight (650 lbs.) (295 kg)
Example 3	Vehicle Capacity	2	<b>* * *</b>	+	
	Maximum Load (1400 lbs.) (635 kg)		Passenger Weight (172 lbs. × 5 = 860 lbs.) (78 kg × 5 = 390 kg)		Cargo Weight (540 lbs.) (245 kg)

#### Certification label



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**

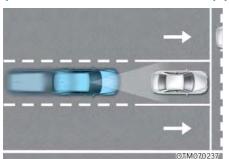
We do not recommend using this vehicle for trailer towing.

## 7

# 7. Driver Assistance System

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



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

### **Detecting sensor**



[1]: Front view camera

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



### CAUTION

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

- Never disassemble the detecting sensor or sensor assembly, or apply any impact on it.
- If the detecting sensors have been replaced or repaired, have your vehicle inspected by an authorized HYUNDAI dealer.
- Never install any accessories or stickers on the front windshield, or tint the front windshield.
- Exercise extreme caution to keep the front view camera dry.
- Never place any reflective objects (for example, white paper, mirror) over the dashboard.

### Forward Collision-Avoidance Assist Settings

### Setting features



#### **Forward Safety**

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

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

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



### WARNING

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



### **CAUTION**

If 'Warning Only' is selected, braking and steering (if equipped) is not assisted.



### Information

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



#### **Warning Timing**

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

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



#### **Warning Volume**

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

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



#### **CAUTION**

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



## Information

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

### **Forward Collision-Avoidance Assist Operation**

#### Basic function

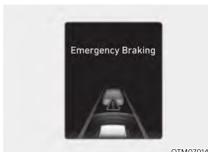
Warning and control

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



#### **Collision Warning**

- To warn the driver of a collision, the 'Collision Warning' warning message will appear on the cluster, an audible warning will sound.
- If a vehicle is detected in front. the function will operate when your vehicle speed is between approximately 6~112 mph (10~180 km/h).
- If a pedestrian or cyclist is detected in front, the function will operate when your vehicle speed is between approximately 6~37 mph (10~60 km/h).
- · If 'Active Assist' is selected, braking may be assisted.



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#### **Emergency Braking**

- To warn the driver that emergency braking will be assisted, the 'Emergency Braking' warning message will appear on the cluster, an audible warning will sound.
- · If a vehicle is detected in front. the function will operate when your vehicle speed is between approximately 6~37 mph (10~60 km/h).
- If a pedestrian is detected in front, the function will operate when your vehicle speed is between approximately 6~37 mph (10~60 km/h).
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the vehicle, pedestrian ahead.



#### Stopping vehicle and ending brake control

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



## **WARNING**

- For your safety, only change the Settings after parking the vehicle at a safe location.
- With 'Active Assist' or 'Warning Only' selected, when ESC is turned off by pressing and holding the ESC OFF button, Forward Collision-Avoidance Assist will turn off automatically. In this case, Forward Collision-Avoidance Assist cannot be set from the Settings menu and the warning light will illuminate on the cluster which is normal. If ESC is turned on by pressing the ESC OFF button, Forward Collision-Avoidance Assist will maintain the last setting.
- Forward Collision-Avoidance Assist does not operate in all situations and cannot avoid all collisions.
- The driver has the responsibility to control the vehicle. Do not solely depend on Forward Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Forward Collision-Avoidance Assist on people, objects, etc. It may cause serious injury or death.
- Forward Collision-Avoidance
   Assist may not operate if the driver depresses the brake pedal to avoid collision.

- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn the driver late or may not warn the driver.
- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- If any other system's warning message is displayed or audible warning is generated, Forward **Collision-Avoidance Assist warning** message may not be displayed and audible warning may not be generated.
- · You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
- Forward Collision-Avoidance Assist may turn off or may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.

#### WARNING

- Even if there is a problem with Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate normally.
- During emergency braking, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.



## ! CAUTION

Forward Collision-Avoidance Assist operating speed range may reduce due to the conditions of the vehicle, pedestrian front or surroundings. Depending on the speed, the function may only warn the driver, or the function may not operate.



### Information

In a situation where collision is imminent, braking may be assisted by Forward Collision-Avoidance Assist when braking is insufficient by the driver.

### Forward Collision-Avoidance Assist Malfunction and Limitations

## Forward Collision-Avoidance Assist malfunction



When Forward Collision-Avoidance
Assist is not working properly, the 'Check
Forward Safety system(s)' warning
message will appear, and the ⚠ and
★ warning lights will illuminate on the
cluster. Have the vehicle be inspected by
an authorized HYUNDAI dealer.

## Forward Collision-Avoidance Assist disabled



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

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

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

If Forward Collision-Avoidance Assist does not operate normally after obstruction (snow, rain, or foreign material) is removed, have the vehicle be inspected by an authorized HYUNDAI dealer.



## WARNING

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

#### Limitations of Forward Collision-Avoidance Assist

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

- The detecting sensor or the surroundings are contaminated or damaged
- The temperature around the front view camera is high or low
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- Washer fluid is continuously sprayed, or the wiper is on
- Driving in heavy rain or snow, or thick fog
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming traffic is reflected on the wet road surface, such as a puddle on the road
- · An object is placed on the dashboard
- Your vehicle is being towed
- The surrounding is very bright
- The surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlights are not on or are not bright
- Driving through steam, smoke or shadow
- Only part of the vehicle, pedestrian is detected
- The vehicle in front is a bus, heavy truck, truck with a unusually shaped cargo, trailer, etc.

- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps are not on or are not bright
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visble, etc.
- The front vehicle's ground clearance is low or high
- A vehicle, pedestrian suddenly cuts in front
- The vehicle in front is detected late
- The vehicle in front is suddenly blocked by an obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed
- The vehicle in front is bent out of shape
- The front vehicle's speed is fast or slow
- The vehicle in front steers in the opposite direction of your vehicle to avoid a collision
- With a vehicle in front, your vehicle changes lane at low speed
- The vehicle in front is covered with snow
- You are departing or returning to the lane
- Unstable driving
- You are on a roundabout and the vehicle in front is not detected
- You are continuously driving in a circle
- The vehicle in front has an unusual shape
- The vehicle in front is driving uphill or downhill
- The pedestrian is not fully detected, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian is wearing clothing or equipment that makes it difficult to detect.



The illustration above shows the image the front view camera and front radar is capable of detecting as a vehicle and pedestrian.

- The pedestrian in front is moving very quickly
- The pedestrian in front is short or is posing a low posture
- The pedestrian in front has impaired mobility
- The pedestrian in front is moving intersected with the driving direction
- There is a group of pedestrians, cyclists or a large crowd in front
- The pedestrian is wearing clothing that easily blends into the background, making it difficult to detect
- The pedestrian is difficult to distinguish from the similarly shaped structure in the surroundings

- You are driving by a pedestrian, traffic signs, structures, etc. near the intersection
- · Driving in a parking lot
- Driving through a tollgate, construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
- Driving on an incline road, curved road, etc.
- Driving through a roadside with trees or streetlights
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Driving through a narrow road where trees or grass are overgrown
- There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise

· Driving on a curved road





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

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





Forward Collision-Avoidance Assist may detect a vehicle, pedestrian in the next lane or outside the lane when driving on a curved road.

If this occurs, Forward Collision-Avoidance Assist may unnecessarily warn the driver and control the brake or steering wheel (if equipped). Always check the traffic conditions around the vehicle.

#### · Driving on an inclined road





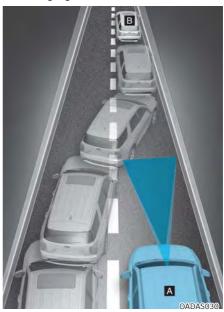
Forward Collision-Avoidance Assist may not detect other vehicles or pedestrians in front of you while driving uphill or downhill, adversely affecting the performance of the sensors.

This may result in unnecessary warning, braking assist or steering assist (if equipped) or no warning, braking assist or steering assist (if equipped) when necessary.

Also, vehicle speed may rapidly decrease when a vehicle or a pedestrian ahead is suddenly detected.

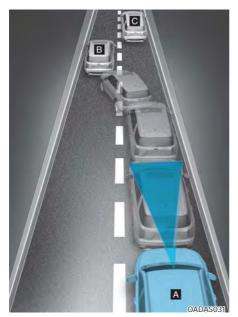
Always have your eyes on the road while driving uphill or downhill and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

#### Changing lanes



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

When a vehicle moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Forward Collision-Avoidance Assist may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

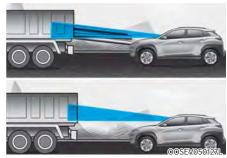


 $\hbox{[A]: Your vehicle, [B]: Lane changing vehicle,}\\$ 

[C]: Same lane vehicle

When a vehicle in front of you merges out of the lane, Forward Collision-Avoidance Assist may not immediately detect the vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

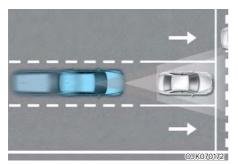
## Detecting vehicle



If the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance, additional special attention is required. Forward Collision-Avoidance Assist may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.

- When you are towing a trailer or another vehicle, turn off Forward Collision-Avoidance Assist for safety reasons.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles or a pedestrians are detected.
- Forward Collision-Avoidance Assist does not operate on bicycles, motorcycles, or smaller wheeled objects, such as luggage bags, shopping carts, or strollers.
- Forward Collision-Avoidance
   Assist may not operate normally if interfered by strong electromagnetic waves.
- Forward Collision-Avoidance Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

## FORWARD COLLISION-AVOIDANCE ASSIST (FCA) (SENSOR **FUSION) (IF EQUIPPED)**



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

#### Detecting sensor





[1]: Front view camera, [2]: Front radar Refer to the picture above for the detailed location of the detecting sensors.



## ! CAUTION

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

- · Never disassemble the detecting sensor or sensor assembly, or apply any impact on it.
- If the detecting sensors have been replaced or repaired, have your vehicle inspected by an authorized HYUNDAI dealer.
- · Never install any accessories or stickers on the front windshield, or tint the front windshield.

- Pay extreme caution to keep the front view camera dry.
- Never place any reflective objects (for example, white paper, mirror) over the dashboard.
- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard, near the front radar cover.
- Always keep the front radar and cover clean and free of dirt and debris.
  - Use only a soft cloth to wash the vehicle. Do not spray pressurized water directly on the sensor or sensor cover.
- If unnecessary force has been applied to the radar or around the radar, Forward Collision-Avoidance Assist may not properly operate even though a warning message does not appear on the cluster. Have the vehicle inspected by an authorized HYUNDAI dealer.
- Use only genuine parts to repair or replace a damaged front radar cover.
   Do not apply paint to the front radar cover.

### Forward Collision-Avoidance Assist Settings

#### Setting features



#### **Forward Safety**

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

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

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



### ! WARNING

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



### ! CAUTION

- · If 'Warning Only' is selected, braking and steering (if equipped) is not assisted.
- · The settings for Forward Safety include 'Basic function' and 'Junction The settings for Forward Safety include 'Basic function'.



### Information

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



#### **Warning Timing**

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

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



#### **Warning Volume**

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

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



### CAUTION

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



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

### Forward Collision-Avoidance Assist Operation

#### Basic function

#### Warning and control

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



#### **Collision Warning**

- To warn the driver of a collision, the 'Collision Warning' warning message will appear on the cluster, an audible warning will sound.
- If a vehicle is detected in front, the function will operate when your vehicle speed is between approximately 6~112 mph (10~180 km/h).
- If a pedestrian or cyclist is detected in front, the function will operate when your vehicle speed is between approximately 6~53 mph (10~85 km/h).
- If 'Active Assist' is selected, braking may be assisted.



#### **Emergency Braking**

- To warn the driver that emergency braking will be assisted, the 'Emergency Braking' warning message will appear on the cluster, an audible warning will sound.
- If a vehicle is detected in front, the function will operate when your vehicle speed is between approximately 6~47 mph (10~75 km/h).
- If a pedestrian or cyclist is detected in front, the function will operate when your vehicle speed is between approximately 6~47 mph (10~65 km/h).
- In emergency braking situation, braking is assisted with strong braking power by the function to help prevent collision with the vehicle, pedestrian or cyclist ahead.



### Stopping vehicle and ending brake control

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

- For your safety, change the Settings after parking the vehicle at a safe location.
- Forward Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.
- The driver has the responsibility to control the vehicle. Do not solely depend on Forward Collision-Avoidance Assist. Rather, maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never deliberately operate Forward Collision-Avoidance Assist on people, objects, etc. It may cause serious injury or death.
- Forward Collision-Avoidance
   Assist may not operate if the driver depresses the brake pedal to avoid collision.

- Depending on the road and driving conditions, Forward Collision-Avoidance Assist may warn the driver late or may not warn the driver.
- During Forward Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- If any other system's warning message is displayed or audible warning is generated, Forward Collision-Avoidance Assist warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
- Forward Collision-Avoidance
   Assist may turn off or may not operate properly or may operate unnecessarily depending on the road conditions and the surroundings.

## A

### **WARNING**

- Even if there is a problem with Forward Collision-Avoidance Assist, the vehicle's basic braking performance will operate normally.
- During emergency braking, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.

## **A** CAUTION

- Forward Collision-AvoidanceAssist operating speed range may reduce due to the conditions of the vehicle or pedestrian in front or surroundings. Depending on the speed, Forward Collision-Avoidance Assist may only warn the driver, or it may not operate.
- Forward Collision-Avoidance Assist will operate under certain conditions by judging the risk level based on the condition of the oncoming vehicle, driving direction, speed and surroundings.



In a situation where collision is imminent, braking may be assisted by Forward Collision-Avoidance Assist when braking is insufficient by the driver.

### Forward Collision-Avoidance Assist Malfunction and Limitations

## Forward Collision-Avoidance Assist malfunction



When Forward Collision-Avoidance
Assist is not working properly, the 'Check
Forward Safety system(s)' warning
message will appear, and the ⚠ and
♣ warning lights will illuminate on the
cluster. Have the vehicle be inspected by
an authorized HYUNDAI dealer.

## Forward Collision-Avoidance Assist disabled



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

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

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

If Forward Collision-Avoidance Assist does not operate normally after obstruction (snow, rain, or foreign material) is removed, have the vehicle be inspected by an authorized HYUNDAI dealer.

## **MARNING**

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

#### Limitations of Forward Collision-Avoidance Assist

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

- The detecting sensor or the surroundings are contaminated or damaged
- The temperature around the front view camera is high or low due to surrounding environment
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or stuck of foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- Washer fluid is continuously sprayed, or the wiper is on
- Driving in heavy rain or snow, or thick fog
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming vehicle is reflected on the wet road surface, such as a puddle on the road
- · An object is placed on the dashboard
- · Your vehicle is being towed
- The surrounding is very bright
- The surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlights are not on or are not bright
- Driving through steam, smoke or shadow
- Only part of the vehicle, pedestrian or cyclist is detected
- The vehicle in front is a bus, heavy truck, truck with a unusually shaped cargo, trailer, etc.

- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps are not on or are not bright
- The rear of the front vehicle is small or the vehicle does not look normal, such as when the vehicle is tilted, overturned, or the side of the vehicle is visble, etc.
- The front vehicle's ground clearance is low or high
- A vehicle, pedestrian or cyclist suddenly cuts in front
- The bumper around the front radar is impacted, damaged or the front radar is out of position
- The temperature around the front radar is high or low
- · Driving through a tunnel or iron bridge
- Driving in large areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- A material is near that reflects very well on the front radar, such as a guardrail, nearby vehicle, etc.
- The cyclist in front is on a bicycle made of material that does not reflect on the front radar
- · The vehicle in front is detected late
- The vehicle in front is suddenly blocked by a obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed
- The vehicle in front is bent out of shape
- The front vehicle's speed is fast or slow

- The vehicle in front steers in the opposite direction of your vehicle to avoid a collision
- With a vehicle in front, your vehicle changes lane at low speed
- The vehicle in front is covered with snow
- You are departing or returning to the lane
- Unstable driving
- You are on a roundabout and the vehicle in front is not detected
- · You are continuously driving in a circle
- The vehicle in front has an unusual shape
- The vehicle in front is driving uphill or downhill
- The pedestrian or cyclist is not fully detected, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian or cyclist is wearing clothing or equipment that makes it difficult to detect as a pedestrian or cyclist



The illustration above shows the image the front view camera and front radar is capable of detecting as a vehicle, pedestrian and cyclist.

- The pedestrian or cyclist in front is moving very quickly
- The pedestrian or cyclist in front is short or is posing a low posture
- The pedestrian or cyclist in front has impaired mobility
- The pedestrian or cyclist in front is moving intersected with the driving direction
- There is a group of pedestrians, cyclists or a large crowd in front
- The pedestrian or cyclist is wearing clothing that easily blends into the background, making it difficult to detect
- The pedestrian or cyclist is difficult to distinguish from the similar shaped structure in the surroundings

- You are driving by a pedestrian, cyclist, traffic signs, structures, etc. near the intersection
- Driving in a parking lot
- Driving through a tollgate, construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
- Driving on an incline road, curved road, etc.
- Driving through a roadside with trees or streetlights
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Driving through a narrow road where trees or grass are overgrown
- There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise

· Driving on a curved road



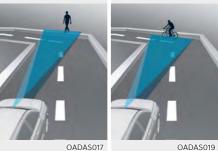




Forward Collision-Avoidance Assist may not detect other vehicles, pedestrians or cyclists in front of you on curved roads adversely affecting the performance of the sensors. This may result in no warning, braking assist or steering assist (if equipped) when necessary.

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





Forward Collision-Avoidance Assist may detect a vehicle, pedestrian or cyclist in the next lane or outside the lane when driving on a curved road.

If this occurs, Forward Collision-Avoidance Assist may unnecessarily warn the driver and control the brake or steering wheel (if equipped). Always check the traffic conditions around the vehicle.

#### · Driving on an inclined road



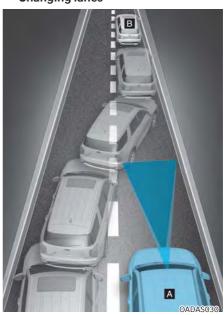
Forward Collision-Avoidance Assist may not detect other vehicles, pedestrians or cyclists in front of you while driving uphill or downhill, adversely affecting the performance of the sensors.

This may result in unnecessary warning, braking assist or steering assist (if equipped) or no warning, braking assist or steering assist (if equipped) when necessary.

Also, vehicle speed may rapidly decrease when a vehicle, pedestrian or cyclist ahead is suddenly detected.

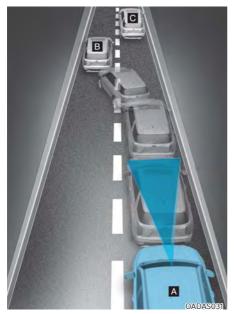
Always have your eyes on the road while driving uphill or downhill and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

#### Changing lanes



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

When a vehicle moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Forward Collision-Avoidance Assist may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



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

[C]: Same lane vehicle

When a vehicle in front of you merges out of the lane, Forward Collision-Avoidance Assist may not immediately detect the vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

### Detecting vehicle



If the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance, additional special attention is required. Forward Collision-Avoidance Assist may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, steer your vehicle and depress the brake pedal to reduce your driving speed in order to maintain distance.

- When you are towing a trailer or another vehicle, turn off Forward Collision-Avoidance Assist for safety reasons.
- Forward Collision-Avoidance Assist may operate if objects that are similar in shape or characteristics to vehicles, pedestrians and cyclists are detected.
- Forward Collision-Avoidance Assist does not operate on bicycles, motorcycles, or smaller wheeled objects, such as luggage bags, shopping carts, or strollers.
- Forward Collision-Avoidance
   Assist may not operate normally if interfered by strong electromagnetic waves.
- Forward Collision-Avoidance Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.

## *i* Information

In some instances, FCA system may be cancelled when subjected to electromagnetic interference.

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

## *i* 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.

### LANE KEEPING ASSIST (LKA) (IF EQUIPPED)

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

#### **Detecting sensor**



[1]: Front view camera

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

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



#### **CAUTION**

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

## **Lane Keeping Assist Settings** Setting features



#### Lane Safety

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

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



### WARNING

- · If 'Warning Only' is selected, steering is not assisted.
- · Lane Keeping Assist does not control the steering wheel when the vehicle is driven in the middle of the lane.
- The driver should always be aware of the surroundings and steer the vehicle if 'Off' is selected.

#### Turning Lane Keeping Assist On/Off



 With the vehicle on, press and hold the Lane Driving Assist button located on the steering wheel to turn on Lane Keeping Assist. The white /=\text{indicator light will illuminate on the cluster.

Press and hold the button again to turn off the function.

## *i* Information

When the Lane Driving Assist button is pressed shortly, Lane Following Assist will turn on and off.

If the vehicle is restarted, Lane Keeping Assist will maintain the last setting.



#### **Warning Volume**

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

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

## **Lane Keeping Assist Operation**

### Warning and control

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



#### **Lane Departure Warning**

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

#### Lane Keeping Assist

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



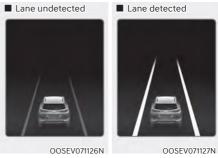
#### Hands-off warning

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

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Keeping Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If the steering wheel is held very lightly, the hands-off warning message may appear because Lane Keeping Assist may not recognize that the driver has their hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

## *i* Information

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



- Even though the steering is assisted by Lane Keeping Assist, the driver may control the steering wheel.
- The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Keeping Assist than when it is not.

### **Lane Keeping Assist Malfunction** and Limitations

#### Lane Keeping Assist malfunction



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

#### Limitations of Lane Keeping Assist

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

- The lane is contaminated or difficult to detect because:
  - The lane markings (or road edge) are covered with rain, snow, dirt, oil. etc.
  - The color of the lane marking (or road edge) is not distinguishable from the road

- There are markings (or road edges) on the road near the lane or the markings (or road edges) on the road looks similar to the lane markings (or road edge)
- The lane marking (or road edge) is indistinct or damaged
- The shadow is on the lane marking (or road edge) by a median strip, trees, quardrail, noise barriers, etc.
- The lane number increases or decreases, or the lane markings (or road edges) are crossing
- · There are more than two lane markings (or road edges) on the road
- The lane markings (or road edges) are complicated or a structure substitutes for the lines, such as a construction
- There are road markings, such as zigzag lanes, crosswalk markings and road signs
- The lane suddenly disappears, such as at the intersection
- · The lane (or road width) is very wide or narrow
- There is a road edge without a lane
- There is a boundary structure in the roadway, such as a tollgate, sidewalk, curb, etc.
- The distance to the front vehicle is extremely short or the vehicle in front is covering the lane marking (or road edge)

## Information

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

Take the following precautions when using Lane Keeping Assist:

- The driver has the responsibility to safely drive and control the vehicle.
   Do not solely rely on Lane Keeping Assist and drive dangerously.
- The operation of Lane Keeping Assist can be cancelled or not work properly depending on road conditions and surroundings. Always be cautious while driving.
- Refer to "Limitations of Lane Keeping Assist" if the lane is not detected properly.
- When you are towing a trailer or another vehicle, turn off Lane Keeping Assist for safety reasons.
- If the vehicle is driven at high speed, the steering wheel will not be controlled. The driver must always follow the speed limit when using Lane Keeping Assist.
- If any other system's warning message is displayed or audible warning is generated, Lane Keeping Assist warning message may not be displayed and audible warning may not be generated.

- You may not hear the warning sound of Lane Keeping Assist if the surrounding is noisy.
- If you attach objects to the steering wheel, steering may not be assisted properly.
- Lane Keeping Assist may not operate for 15 seconds after the vehicle is started, or the front view camera is initialized.
- Lane Keeping Assist will not operate when:
  - The turn signal or hazard warning flasher is turned on.
  - The vehicle is not driven in the center of the lane when Lane Keeping Assist is turned on or right after changing a lane.
  - ESC (Electronic Stability Control) or VSM (Vehicle Stability Management) is activated.
  - The vehicle is driven on a sharp curve.
  - Vehicle speed is below 35 mph (55 km/h) or above 130mph (210 km/h).
  - The vehicle makes sudden lane changes.
  - The vehicle brakes suddenly.

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

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

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

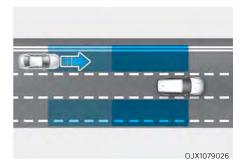


Blind-Spot Collision-Avoidance Assist helps detect and inform the driver that a vehicle is in the blind spot.



### **CAUTION**

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



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

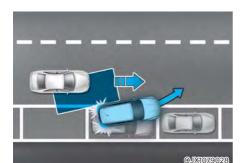


## CAUTION

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



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



When you are driving forward out of a parking space, if Blind-Spot Collision-Avoidance Assist judges that there is a collision risk with an approaching vehicle in the blind spot, it will help avoid collision by applying the brake.

## **Detecting sensor**





[1]: Front view camera

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



## ! CAUTION

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

- Never disassemble the rear corner radar or radar assembly, or cause any damage to it.
- If has been damaged or impacted in any way, on the rear corner radar or near the radar, even though the warning message does not appear on the cluster, Blind-Spot Collision-Avoidance Assist may not operate properly. Have the vehicle be inspected by an authorized HYUNDAI dealer.
- If the rear corner radars have been replaced or repaired, have the vehicle inspected by an authorized HYUNDAI dealer.
- Use only genuine parts to repair the rear bumper where the rear corner radar is located.
- Do not apply license plate frame or objects, such as a bumper sticker, film or a bumper guard near the rear corner radar.
- The function may not work properly if the bumper has been replaced, or the surroundings of the rear corner radar have been damaged or paint has been applied.
- If a trailer, carrier, etc. is installed, it may adversely affect the performance of the rear corner radar or the function may not operate.

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

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

#### Setting features



#### **Blind-Spot Safety**

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

- If 'Active Assist' is selected, the function will warn the driver with a warning message, an audible warning, steering wheel vibration and braking assist will be applied depending on the collision risk levels.
- If 'Warning Only' is selected, the function will warn the driver with a warning message, an audible warning and steering wheel vibration depending on the collision risk levels. Braking will not be assisted.
- If 'Off' is selected, the function will turn off.



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

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

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



## ! WARNING

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



## Information

If the vehicle is restarted, Blind-Spot Safety system will maintain the last setting.



#### **Warning Timing**

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

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



#### **Warning Volume**

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

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



### **CAUTION**

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

## Blind-Spot Collision-Avoidance Assist Operation

### Warning and control



#### Vehicle detection

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

### **Collision Warning**

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

### WARNING

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



### *i* Information

If the driver's seat is on the left side, the collision warning may occur when you turn left. Maintain a proper distance with the vehicles in the left lane.



### Collision-Avoidance Assist (while driving)

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

## **MARNING**

- Collision-Avoidance Assist will be canceled under the following circumstances:
  - Your vehicle enters the next lane by a certain distance
  - Your vehicle is away from the collision risk
  - The steering wheel is sharply steered
  - The brake pedal is depressed
  - Forward Collision-Avoidance Assist is operating
- After Blind-Spot Collision-Avoidance
   Assist operation or changing lane,
   you must drive to the center of the
   lane. Blind-Spot Collision-Avoidance
   Assist will not operate if the vehicle is
   not driven in the center of the lane.



### Collision-Avoidance Assist (while departing)

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



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

## **⚠** WARNING

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

- For your safety, change the Settings after parking the vehicle at a safe location.
- If any other system's warning message is displayed or audible warning is generated, Blind-Spot Collision-Avoidance Assist's warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Blind-Spot Collision-Avoidance Assist if the surrounding is noisy.
- Blind-Spot Collision-Avoidance
   Assist may not operate if the driver applies the brake pedal to avoid collision.
- When Blind-Spot Collision-Avoidance Assist is operating, braking control by the function will automatically cancel when the driver excessively depresses the accelerator pedal or sharply steers the vehicle.
- During Blind-Spot Collision-Avoidance Assist operation, the vehicle may stop suddenly injuring passengers and shifting loose objects. Always have the seat belt on and keep loose objects secured.
- Even if there is a problem with Blind-Spot Collision-Avoidance Assist, the vehicle's basic braking performance will operate normally.
- Blind-Spot Collision-Avoidance Assist does not operate in all situations or cannot avoid all collisions.

- Blind-Spot Collision-Avoidance
   Assist may warn the driver late or may not warn the driver depending on the road and driving conditions.
- Driver should maintain control of the vehicle at all times. Do not depend on Blind-Spot Collision-Avoidance Assist. Maintain a safe braking distance, and if necessary, depress the brake pedal to reduce driving speed or to stop the vehicle.
- Never operate Blind-Spot Collision-Avoidance Assist on people, animal, objects, etc. It may cause serious injury or death.



### WARNING

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

There will only be a warning when:

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

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

### Blind-Spot Collision-Avoidance Assist malfunction



When Blind-Spot Collision-Avoidance Assist is not working properly, the 'Check Blind-Spot Safety system' warning message will appear on the cluster, and the master (1) warning light will illuminate on the cluster. If this occurs, have the vehicle be inspected by an authorized HYUNDAI dealer.



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

### Blind-Spot Collision-Avoidance Assist disabled



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

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

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

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



### **!** WARNING

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



### **CAUTION**

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

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

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

- There is inclement weather, such as heavy snow, heavy rain, etc.
- · The rear corner radar is covered with snow, rain, dirt, etc.
- The temperature around the rear corner radar is high or low
- Driving on a highway (or motorway)
- The road pavement (or the peripheral ground) abnormally contains metallic components (for example, possibly due to subway construction)

- There is a fixed object near the vehicle, such as sound barriers, guardrails, central dividers, entry barriers, street lamps, signs, tunnels, walls, etc. (including double structures)
- Driving in large areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- Driving through a narrow road where trees or grass are overgrown
- Driving on a wet road surface, such as a puddle on the road
- The other vehicle drives very close behind your vehicle, or the other vehicle passes by your vehicle in close proximity
- The speed of the other vehicle is very fast that it passes by your vehicle in a short time
- Your vehicle passes by the other vehicle
- Your vehicle changes lane
- Your vehicle has started at the same time as the vehicle next to you and has accelerated
- The vehicle in the next lane moves two lanes away from you, or when the vehicle two lanes away moves to the next lane from you
- A trailer or carrier is installed around the rear corner radar
- The bumper around the rear corner radar is covered with objects, such as a bumper sticker, bumper guard, bike rack, etc.
- The bumper around the rear corner radar is impacted, damaged or the radar is out of position
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.

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

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

Steering assist or braking control may not work, driver's attention is required in the following circumstances:

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

## *i* Information

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



· Driving on a curved road



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

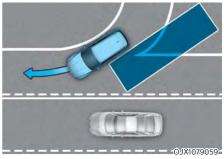
Always pay attention to road and driving conditions while driving.



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

Always pay attention to road and driving conditions while driving.

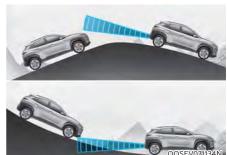
 Driving where the road is merging/ dividing



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

Always pay attention to road and driving conditions while driving.

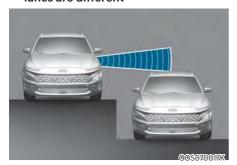
Driving on an inclined road



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

Always pay attention to road and driving conditions while driving.

 Driving where the heights of the lanes are different



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

Always pay attention to road and driving conditions while driving.

### **⚠** WARNING

- When you are towing a trailer or another vehicle, make sure that you turn off Blind-Spot Collision-Avoidance Assist.
- Blind-Spot Collision-Avoidance
   Assist may not operate normally if interfered by strong electromagnetic waves.
- Blind-Spot Collision-Avoidance
   Assist may not operate for 15 seconds after the vehicle is started, or the front view camera or rear corner radars are initialized.

## *i* Information

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

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

## *i* Information

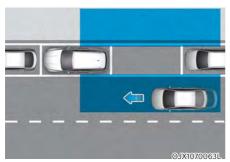
Radio frequency radiation exposure information:

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.

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



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



### CAUTION

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

### **Detecting sensor**



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



### CAUTION

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

### **Safe Exit Warning Settings**

### Setting features



### Safe Exit Warning

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



The driver should always be aware of the surroundings. If 'Safe Exit Warning' is deselected, Safe Exit Warning cannot assist you.

## *i* Information

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



### **Warning Timing**

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

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



### **Warning Volume**

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

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



### **CAUTION**

The setting of Warning Volume applies to all functions of the Safe Exit Warning.

## Safe Exit Warning Operation Safe Exit Warning



Collision warning when exiting vehicle

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

## **MARNING**

Take the following precautions when using Safe Exit Warning:

- For your safety, only change the Settings after parking the vehicle at a safe location.
- If any other system's warning message is displayed or audible warning is generated, Safe Exit Warning warning message may not be displayed and audible warning may not be generated.
- You may not hear the warning sound of Safe Exit Warning if the surrounding is noisy.
- Safe Exit Warning does not operate in all situations and cannot prevent all collisions.
- Safe Exit Warning may warn the driver late or may not warn the driver depending on the road and driving conditions. Always check vehicle surroundings.
- The driver and passengers are responsible for accidents that occur while exiting the vehicle. Always check the surroundings before you exit the vehicle.
- Never deliberately operate Safe Exit Warning. Doing so may lead to serious injury or death.
- Safe Exit Warning does not operate if there is a problem with Blind-Spot Collision-Avoidance Assist. The warning message of Blind-Spot Collision-Avoidance Assist will appear when:
  - Blind-Spot Collision-Avoidance Assist sensor or the sensor surrounding is polluted or covered
  - Blind-Spot Collision-Avoidance Assist fails to warn passengers or falsely warn passengers

## *i* Information

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

## Safe Exit Warning Malfunction and Limitations

Safe Exit Warning malfunction



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When Safe Exit Warning is not working properly, the 'Check Blind-Spot Safety system' warning message will appear on the cluster for several seconds, and the master (1) warning light will illuminate on the cluster. If the master warning light illuminates, have the vehicle inspected by an authorized HYUNDAI dealer.



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

### Safe Exit Warning disabled



When the rear bumper around the rear corner radar or sensor is covered with foreign material, such as snow or rain, or installing a trailer or carrier, it can reduce the detecting performance and temporarily limit or disable Safe Exit Warning.

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

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

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

### **⚠** WARNING

- Even though the warning message does not appear on the cluster, Safe Exit Warning may not properly operate.
- Safe Exit Warning may not properly operate in an area (for example, open terrain) where any objects are not detected right after the vehicle is turned on, or when the detecting sensor is blocked with foreign material right after the vehicle is turned on.



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

### Limitations of Safe Exit Warning

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

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



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



### WARNING

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

### **DRIVER ATTENTION WARNING (DAW)**

#### **Basic function**

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

## Leading vehicle departure alert function

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

### **Detecting sensor**



[1]: Front view camera

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

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

## **CAUTION**

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

## **Driver Attention Warning Settings Setting features**



### **Driver Attention Warning**

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

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



### **Leading Vehicle Departure Alert**

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



#### **Warning Timing**

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

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

## *i* Information

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

## **Driver Attention Warning Operation**

#### Basic function

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

### **Attention level**



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

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

### Taking a break



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



### WARNING

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

## **A** CAUTION

- Driver Attention Warning may suggest a break depending on the driver's driving pattern or habits, even if the driver doesn't feel fatigue.
- Driver Attention Warning is a supplemental function and may not be able to determine whether the driver is inattentive.
- A driver who feels fatigued should take a break at a safe location, even though there is no break suggestion by Driver Attention Warning.

## *i* Information

- You may change settings from the instrument cluster (User Settings) or infotainment system (Vehicle Settings), whichever option that is provided with your vehicle. For more details, see "User Settings" section in chapter 4, or "Vehicle Settings" section in supplied Infotainment Manual.
- Driver Attention Warning will reset the last break time to 00:00 in the following situations:
  - The vehicle is turned off
  - The driver unfastens the seat belt and opens the driver's door
  - The vehicle is stopped for more than 10 minutes
- When the driver resets Driver Attention Warning, the last break time is set to 00:00 and the driver's attention level is set to High.

## Leading vehicle Departure Alert function



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

### 1

### WARNING

- If any other system's warning message is displayed or audible warning is generated, Leading Vehicle Departure Alert's warning message may not be displayed and audible warning may not be generated.
- The driver has the responsibility to safely drive and control the vehicle.

## **CAUTION**

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

## **Driver Attention Warning Malfunction and Limitations**

## Driver Attention Warning malfunction



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

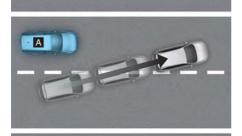
## Limitations of Driver Attention Warning

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

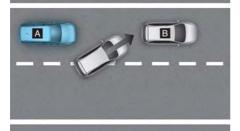
- · The vehicle is driven violently
- The vehicle intentionally crosses over lanes frequently
- The vehicle is controlled by Driver Assistance system, such as Lane Keeping Assist

### Leading vehicle departure alert function

· When the vehicle cuts in



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OADAS022

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

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

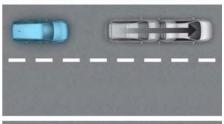
· When the vehicle ahead sharply steers



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

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

• When the vehicle ahead abruptly departures



OADAS024

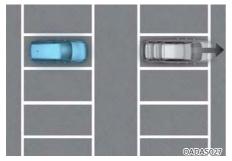
If the vehicle in front abruptly departures, Leading Vehicle Departure Alert may not operate properly.

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

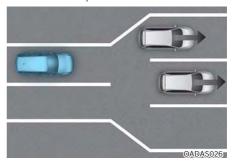


If there is a pedestrian(s) or bicycle(s) in between you and the vehicle in front, Leading Vehicle Departure Alert may not operate properly.

When in a parking lot



If a vehicle parked in front drives away from you, Leading Vehicle Departure Alert may alert you that the parked vehicle is driving away. When driving at a tollgate or intersection, etc.



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

## *i* Information

For more details on the precautions of the front view camera, refer to "Forward Collision-Avoidance Assist (FCA)" section in this chapter 7.

### **CRUISE CONTROL (CC) (IF EQUIPPED)**



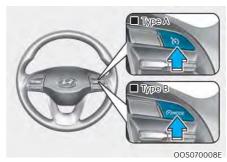
- (1) Cruise indicator
- (2) Set speed

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

### **Cruise Control Operation**

### To set speed

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

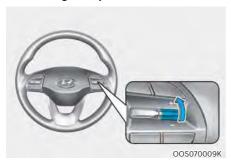


- 2. Press the Driving Assist button at the desired speed. The set speed and Cruise (\*\*) CRUISE) indicator will illuminate on the cluster.
- Release the accelerator pedal.
   Vehicle speed will maintain the set speed even when the accelerator pedal is not depressed.



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

### Increasing set speed



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

Release the switch when the desired speed is shown and the vehicle will accelerate to that speed.

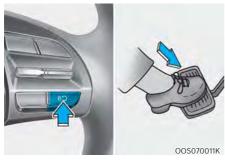
### Decreasing set speed



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

Release the switch at the speed you want to maintain.

## Temporarily canceling Cruise Control

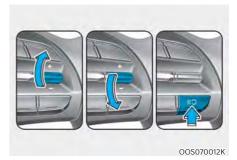


Cruise Control will be paused when:

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

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

### Resuming Cruise Control



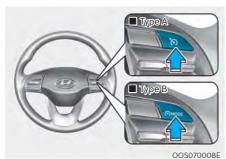
Push the +, - switch or **II** button.

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

If you Press the **II 5** button, vehicle speed will resume to the preset speed.

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

### **Turning off Cruise Control**



Press the Driving Assist button to turn Cruise Control off. The Cruise (\*\*GCRUISE) indicator will go off.

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



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

## **⚠** WARNING

Take the following precautions when using Cruise Control:

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

### **SMART CRUISE CONTROL (SCC) (IF EQUIPPED)**

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

#### **Overtaking Acceleration Assist**

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

### **Detecting sensor**





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

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

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

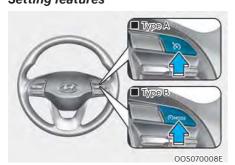


### CAUTION

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

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

### Smart Cruise Control Settings Setting features



To turn on Smart Cruise Control

- Press the Driving Assist button to turn on Smart Cruise Control. The speed will be set to the current speed on the cluster.
- If there is no vehicle in front of you, the set speed will be maintained, but if there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead. If the vehicle ahead accelerates, your vehicle will travel at a steady cruising speed after accelerating to the set speed.

### *i* Information

- If your vehicle speed is between 0~20 mph (0~30 km/h) when you press the Driving Assist button, the Smart Cruise Control speed will be set to 0~20 mph (0~30 km/h).
- The Driving Assist button symbol may vary depending on your vehicle option.



To set vehicle distance

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



### *i* Information

- If you drive at 56 mph (90km/h), the distance is maintained as follows:

  Distance 4 approximately 172 ft. (52.5 m)

  Distance 3 approximately 130 ft. (40 m)

  Distance 2 approximately 106 ft. (32.5 m)
  - Distance 1 approximately 82 ft. (25 m)
- The distance is set to the last set distance when the vehicle is restarted, or when Smart Cruise Control was temporarily canceled.



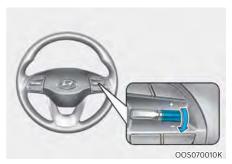
### Increasing set speed

- Push the + switch up and release it immediately. The set speed will increase by 1 mph (1 km/h) each time the switch is operated in this manner.
- Push the + switch up and hold it while monitoring the set speed on the cluster. The set speed will increase by 5 mph or 10 km/h each time the switch is operated in this manner. Release the switch when the desired speed is shown, and the vehicle will accelerate to that speed. You can increase the set speed to 110 mph (180 km/h).



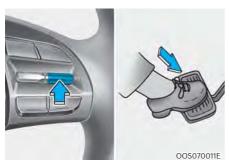
### WARNING

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



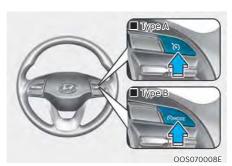
### Decreasing set speed

- Push the switch down and release it immediately. The set speed will decrease by 1 mph (1 km/h) each time the switch is operated in this manner.
- Push the switch down and hold it while monitoring the set speed on the cluster. The set speed will decrease by 5 mph or 10 km/h each time the switch is operated in this manner.
   Release the switch at the speed you want to maintain. You can decrease the set speed to 20 mph (30 km/h).

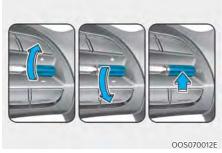


**Temporarily canceling Smart Cruise Control** 

Press the (II ) switch or depress the brake pedal to temporarily cancel Smart Cruise Control.



Turning off Smart Cruise Control
Press the Driving Assist button to turn
Smart Cruise Control system off.



**Resuming Smart Cruise Control** 

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

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

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



Check the driving condition before using the [15] switch. Driving speed may sharply increase or decrease when you press the [15] switch.



#### **Smart Cruise Reaction**

With the vehicle on, select 'Driver Assistance → Smart Cruise Reaction' from the Settings menu to select the sensitivity of vehicle speed when following the front vehicle to maintain the set distance.



#### **Warning Volume**

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

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



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

### Smart Cruise Control Operation Operating conditions

#### **Basic function**

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

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

## *i* Information

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

#### **Overtaking Acceleration Assist**

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

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

### **MARNING**

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

## **Smart Cruise Control Display and Control**

### Basic function

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

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



- · When operating
- (1) Whether there is a vehicle ahead and the selected distance level.
- (2) Set speed.
- (3) Whether there is a vehicle ahead and the target headway are displayed.
- · When temporarily canceled
- (1) TO CRUISE indicator.
- (2) The previous set speed is shaded.

## *i* Information

- The distance of the front vehicle on the cluster is displayed according to the actual distance between your vehicle and the vehicle ahead.
- The target distance may vary according to the vehicle speed and the set distance level. If the vehicle speed is low, even though the vehicle distance have changed, the change of the target vehicle distance may be small.

### To temporarily accelerate



If you want to speed up temporarily when Smart Cruise Control is on, depress the accelerator pedal. While the speed is increasing, the set speed, distance level and target distance will blink on the cluster.

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



### WARNING

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

## Smart Cruise Control temporarily canceled



Smart Cruise Control will be temporarily canceled automatically when:

- The vehicle speed is above 120 mph (190 km/h)
- The accelerator pedal is continuously depressed for a certain period of time
- The conditions for the Smart Cruise Control to operate is not satisfied

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

If Smart Cruise Control is temporarily canceled while the vehicle is at a standstill with the function activated, EPB (Electronic Parking Brake) maybe applied.



### WARNING

When Smart Cruise Control is temporarily canceled, distance with the front vehicle will not be maintained. Always have your eyes on the road while driving, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

## Smart Cruise Control conditions not satisfied



If the Driving Assist button, + switch, - switch or || 5 switch is pushed when Smart Cruise Control operating conditions are not satisfied, the 'Smart Cruise Control conditions not met' will appear on the cluster, and an audible warning will sound.

#### In traffic situation



In traffic, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving, your vehicle will start as well. In addition, after the vehicle has stopped and a certain time have passed, the 'Use switch or pedal to accelerate' message will appear on the cluster. Depress the accelerator pedal or operate the + switch, - switch or II' switch to start driving.

### Warning road conditions ahead



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

 The vehicle in front disappears when Smart Cruise Control is maintaining the distance with the vehicle ahead while driving below a certain speed.

## A

### WARNING

Always pay attention to vehicles or objects that may suddenly appear in front of you, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

### **Collision Warning**



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While Smart Cruise Control is operating, when the collision risk with the vehicle ahead is high, the 'Collision Warning' warning message will appear on the cluster, and an audible warning will sound to warn the driver. Always have your eyes on the road while driving, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



### WARNING

In the following situations, Smart Cruise Control may not warn the driver of a collision.

- The distance from the front vehicle is near, or the vehicle speed of the front vehicle is faster or similar to your vehicle
- The speed of the front vehicle is very slow or is at a standstill
- The accelerator pedal is depressed right after Smart Cruise Control is turned on

## **MARNING**

Take the following precautions when using Smart Cruise Control:

- Smart Cruise Control does not substitute for proper and safe driving. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.
- Smart Cruise Control may not recognize unexpected and sudden situations or complex driving situations, so always pay attention to driving conditions and control your vehicle speed.
- Keep Smart Cruise Control off when the function is not in use to avoid inadvertently setting a speed.
- Do not open the door or leave the vehicle when Smart Cruise Control is operating, even if the vehicle is stopped.
- Always be aware of the selected speed and headway distance.
- Keep a safe distance according to road conditions and vehicle speed. If the headway distance is too close during high-speed driving, a serious collision may result.
- When maintaining distance with the vehicle ahead, if the front vehicle disappears, Smart Cruise Control may suddenly accelerate to the set speed. Always be aware of unexpected and sudden situations from occurring.
- Vehicle speed may decrease on an upward slope and increase on a downward slope.
- Always be aware of situations such as when a vehicle cuts in suddenly.
- When you are towing a trailer or another vehicle, turn off Smart Cruise Control for safety reasons.

- Turn off Smart Cruise Control when your vehicle is being towed.
- Smart Cruise Control may not operate normally if interfered by strong electromagnetic waves.
- Smart Cruise Control may not detect an obstacle in front and lead to a collision. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.
- Vehicles moving in front of you with a frequent lane change may cause a delay in Smart Cruise Control reaction or may cause 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 surroundings and drive safely, even though a warning message does not appear or an audible warning does not sound.
- If any other system's warning message is displayed or warning sound is generated, Smart Cruise Control warning message may not be displayed and warning sound may not be generated.
- You may not hear the warning sound of Forward Collision-Avoidance Assist if the surrounding is noisy.
- The vehicle manufacturer is not responsible for any traffic violation or accidents caused by the driver.
- Always set the vehicle speed under the speed limit in your country.
- Vehicle distance, acceleration and reaction speed may change if the driver's driving style changes.

## **A** CAUTION

- The vehicle must be driven sufficiently to reflect the actual driving style of the driver, such as inter-vehicle distance, acceleration and reaction speed.
- Based on Driving style does not reflect whether the driver has changed when determining the driver's driving style.
- If you are driving in special conditions, such as snow, rain, fog or steep slopes, the vehicle may not be driven according to the driver's driving style.

### *i* Information

- Smart Cruise Control may not operate for 15 seconds after the vehicle is started or the front view camera or front radar is initialized.
- You may hear a sound when the brake is controlled by Smart Cruise Control.

# Smart Cruise Control Malfunction and Limitations Smart Cruise Control malfunction



When Smart Cruise Control is not working properly, the 'Check Smart Cruise Control system' warning message will appear, and the \( \underset \) warning light will illuminate on the cluster. Have the vehicle inspected by an authorized HYUNDAI dealer.

#### Smart Cruise Control disabled



OTM070115N

When the front radar cover or sensor is covered with snow, rain, or foreign material, it can reduce the detecting performance and temporarily limit or disable Smart Cruise Control.

If this occurs the 'Smart Cruise Control disabled. Radar blocked' warning message will appear for a certain period of time on the cluster.

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



#### WARNING

Even though the warning message does not appear on the cluster, Smart Cruise Control may not properly operate.



#### **CAUTION**

Smart Cruise Control may not properly operate in an area (for example, open terrain), where there is nothing to detect after turning ON the vehicle.

#### Limitations of Smart Cruise Control

Smart Cruise Control may not operate normally, or it may operate unexpectedly under the following circumstances:

- The detecting sensor or the surroundings are contaminated or damaged
- Washer fluid is continuously sprayed, or the wiper is on
- The camera lens is contaminated due to tinted, filmed or coated windshield, damaged glass, or stuck of foreign material (sticker, bug, etc.) on the glass
- Moisture is not removed or frozen on the windshield
- The field of view of the front view camera is obstructed by sun glare
- Street light or light from an oncoming vehicle is reflected on the wet road surface, such as a puddle on the road
- The temperature around the front view camera is high or low
- · An object is placed on the dashboard
- The surrounding is very bright
- The surrounding is very dark, such as in a tunnel, etc.
- The brightness changes suddenly, for example when entering or exiting a tunnel
- The brightness outside is low, and the headlights are not on or are not bright
- Driving in heavy rain or snow, or thick fog
- Driving through steam, smoke or shadow

- · Only part of the vehicle is detected
- The vehicle in front has no tail lights, tail lights are located unusually, etc.
- The brightness outside is low, and the tail lamps are not on or are not bright
- The rear of the front vehicle is small or does not look normal (for example, tilted, overturned, etc.)
- The front vehicle's ground clearance is low or high
- A vehicle suddenly cuts in front
- · Your vehicle is being towed
- · Driving through a tunnel or iron bridge
- Driving near areas containing metal substances, such as a construction zone, railroad, etc.
- An object reflecting off the front radar such as a guardrail, nearby vehicle, etc.
- The bumper around the front radar is impacted, damaged or the front radar is out of position
- The temperature around the front radar is high or low
- Driving in vast areas where there are few vehicles or structures (for example, desert, meadow, suburb, etc.)
- The vehicle in front is made of material that does not reflect on the front radar
- Driving near a highway (or motorway) interchange or tollgate
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- Driving on a curved road
- The vehicle in front is detected late
- The vehicle in front is suddenly blocked by a obstacle
- The vehicle in front suddenly changes lane or suddenly reduces speed

- The vehicle in front is bent out of shape
- The front vehicle's speed is fast or slow
- With a vehicle in front, your vehicle changes lane at low speed
- The vehicle in front is covered with snow
- Unstable driving
- You are on a roundabout and the vehicle in front is not detected
- You are continuously driving in a circle
- · Driving in a parking lot
- Driving through a construction area, unpaved road, partial paved road, uneven road, speed bumps, etc.
- Driving on an incline road, curved road, etc.
- Driving through a roadside with trees or streetlights
- The adverse road conditions cause excessive vehicle vibrations while driving
- Your vehicle height is low or high due to heavy loads, abnormal tire pressure, etc.
- Driving through a narrow road where trees or grass are overgrown
- There is interference by electromagnetic waves, such as driving in an area with strong radio waves or electrical noise

#### · Driving on a curved road



On curves, Smart Cruise Control may not detect a vehicle in the same lane, and may accelerate to the set speed. Also, vehicle speed may rapidly decrease when the vehicle ahead is detected suddenly.

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



Your vehicle speed can be reduced due to a vehicle in the adjacent lane.

Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the Smart Cruise Control.

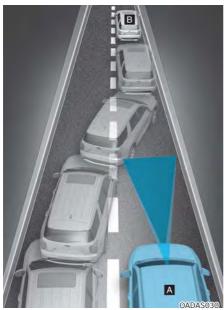
#### Driving on an inclined road



During uphill or downhill driving, the Smart Cruise Control may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, vehicle speed will rapidly decrease when the vehicle ahead is detected suddenly.

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

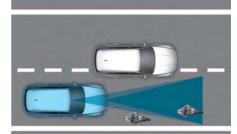
#### · Changing lanes



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

When a vehicle moves into your lane from an adjacent lane, it cannot be detected by the sensor until it is in the sensor's detection range. Smart Cruise Control may not immediately detect the vehicle when the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

#### Detecting vehicle

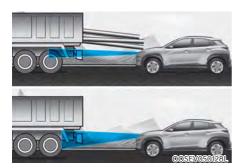


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In the following cases, some vehicles in your lane cannot be detected by the sensor:

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

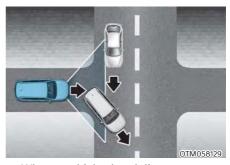
Adjust your vehicle speed by depressing the brake pedal according to the road and driving conditions ahead.



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

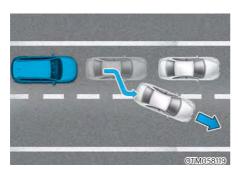
- Vehicles with higher ground clearance or vehicles carrying loads that stick out of the back of the vehicle
- Vehicles that has the front lifted due to heavy loads
- You are steering your vehicle
- Driving on narrow or sharply curved roads

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

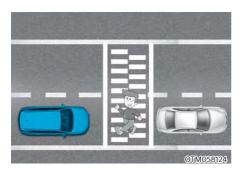


 When a vehicle ahead disappears at an intersection, your vehicle may accelerate.

Always pay attention to road and driving conditions while driving.



 When a vehicle in front of you merges out of the lane, Smart Cruise Control may not immediately detect the new vehicle that is now in front of you.
 Always pay attention to road and driving conditions while driving.



 Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.

### *i* Information

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

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

### *i* 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.

# NAVIGATION-BASED SMART CRUISE CONTROL (NSCC) (IF EQUIPPED)

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

### Information

The Navigation-based Smart Cruise Control system is available only on controlled access road of certain highways.

\* Controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.

### *i* Information

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

#### **Highway Curve Zone Auto Slowdown**

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

#### **Highway Set Speed Auto Change**

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

## **Navigation-Based Smart Cruise Control Settings**



With the vehicle on, select 'Driver Assistance → Driving Assist → Auto Highway Speed Control' from the Settings menu to turn on Navigationbased Smart Cruise Control and deselect to turn off the function.

## *i* Information

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

## **Navigation-Based Smart Cruise Control Operation**

#### Operating conditions

Navigation-based Smart Cruise Control is ready to operate if all of the following conditions are satisfied:

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

## *i* Information

For more details on how to operate Smart Cruise Control, refer to "Smart Cruise Control (SCC)" section in this chapter.

#### Navigation-based Smart Cruise Control display and control

When Navigation-based Smart Cruise Control operates, it will be displayed on the cluster as follows:



Navigation-based Smart Cruise Control standby

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



**Navigation-based Smart Cruise Control operating** 

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

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

### **MARNING**



'Drive carefully' warning message will appear in the following circumstances:

 Navigation-based Smart Cruise Control is not able to slow down your vehicle to a safe speed



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

#### Highway Curve Zone Auto Slowdown

- Depending on the curve ahead on the highway (or motorway), the vehicle will decelerate, and after passing the curve, the vehicle will accelerate to Smart Cruise Control set speed.
- Vehicle deceleration time may differ depending on the vehicle speed and the degree of the curve on the road. The higher the driving speed, deceleration will start faster.

#### **Highway Set Speed Auto Change**

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

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

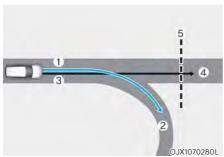
### *i* Information

- Highway Set Speed Auto Change function only operates based on the speed limits of the highway (or motorway), it does not work with the speed cameras.
- When Highway Set Speed Auto Change function is operating, the vehicle automatically accelerates or decelerates when the highway (or motorway) speed limit changes.
- The maximum set speed for Highway Set Speed Auto Change function is 81 mph (130 km/h).
- If the speed limit of a new road is not updated in the navigation, Highway Set Speed Auto Change function may not operate properly.
- If the speed unit is set to a unit other than the speed unit used in your country, Highway Set Speed Auto Change function may not operate properly.

#### Limitations of Navigation-Based Smart Cruise Control

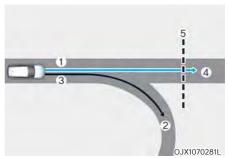
Navigation-based Smart Cruise Control may not operate normally under the following circumstances:

- · The navigation is not working properly
- Map information is not transmitted due to infotainment system's abnormal operation
- Speed limit and road information in the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- The navigation searches for a route while driving
- GPS signals are blocked in areas such as a tunnel
- A road that divides into two or more roads and joins again
- The driver goes off course the route set in the navigation
- The route to the destination is changed or canceled by resetting the navigation
- The vehicle enters a service station or rest area
- Android Auto or Car Play is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads including overpass adjacent to general roads or nearby roads exist in a parallel way)
- The navigation is being updated while driving
- The navigation is being restarted while driving
- The speed limit of some sections changes according to the road situations
- Driving on a road under construction
- · Driving on a road that is controlled
- There is bad weather, such as heavy rain, heavy snow, etc.
- Driving on a road that is sharply curved



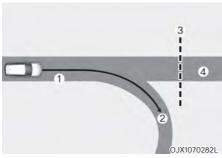
[1]: Set route, [2]: Branch line, [3]: Driving route, [4]: Main road, [5]: Curved road section

- When there is a difference between the navigation set route (branch line) and the driving route (main road), Highway Curve Zone Auto Slowdown function may not operate until the driving route is recognized as the main road.
- When the vehicle's driving route is recognized as the main road by maintaining the main road instead of the navigation set route, Highway Curve Zone Auto Slowdown function will operate. Depending on the distance to the curve and the current vehicle speed, vehicle deceleration may not be sufficient or may decelerate rapidly.



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

- When there is a difference between the navigation route (main road) and the driving route (branch line), Highway Curve Zone Auto Slowdown function will operate based on the curve information on the main road.
- When it is judged that you are driving out of the route by entering the highway interchange or junction, Highway Curve Zone Auto Slowdown function will not operate.



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

- If there is no destination set on the navigation, Highway Curve Zone Auto Slowdown function will operate based on the curve information on the main road.
- Even if you depart from the main road, Highway Curve Zone Auto Slowdown function may temporarily operate due to navigation information of the highway curve section.



#### WARNING

- Navigation-based Smart Cruise Control is not a substitute for safe driving practices, but a convenience function. Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws.
- The navigation's speed limit information may differ from the actual speed limit information on the road. It is the driver's responsibility to check the speed limit on the actual driving road or lane.
- Navigation-based Smart Cruise Control will automatically be cancelled when you leave the highway (or motorway) main road. Always pay attention to road and driving conditions while driving.
- Navigation-based Smart Cruise Control may not operate due to the existence of leading vehicles and the driving conditions of the vehicle. Always pay attention to road and driving conditions while driving.
- When you are towing a trailer or another vehicle, turn off Navigation based Smart Cruise Control for safety reasons.
- After you pass through a tollgate on a highway (or motorway), Navigationbased Smart Cruise Control will operate based on the first lane. If you enter one of the other lanes, the function might not operate properly.
- The vehicle will accelerate if the driver depresses the accelerator pedal while Navigation-based Smart Cruise Control is operating, and the function will not decelerate the vehicle. However, if the accelerator pedal is depressed insufficiently, the vehicle may decelerate.

- If the driver accelerates and releases the accelerator pedal while Navigation-based Smart Cruise Control is operating, the vehicle may not decelerate sufficiently or may rapidly decelerate to a safe speed.
- If the curve is too large or too small, Navigation-based Smart Cruise Control may not operate.

### *i* Information

- The time gap could occur between the navigation's guidance and when Navigation-based Smart Cruise Control operation starts and ends.
- The speed information on the cluster and navigation may differ.
- Even if you are driving at a speed lower than Smart Cruise Control set speed, acceleration may be limited by the curve sections ahead.
- If Navigation-based Smart Cruise Control is operating while leaving the main road to enter an interchange, junction, rest area, etc., the function may operate for a certain period of time.
- Deceleration by Navigation-based Smart Cruise Control may feel it is not sufficient due to road conditions such as uneven road surfaces, narrow lanes, etc.

### *i* Information

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

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

### *i* 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.

#### LANE FOLLOWING ASSIST (LFA) (IF EQUIPPED)

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

#### **Detecting sensor**



[1]: Front view camera

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

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



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

## **Lane Following Assist Settings Setting features**



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

Press the button again to turn off the function.



#### **Warning Volume**

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

## Lane Following Assist Operation Warning and control



#### Lane Following Assist

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



#### CAUTION

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



#### Hands-off warning

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

First stage: Warning message
Second stage: Warning message (red
steering wheel) and
audible warning



If the driver still does not have their hands on the steering wheel after the hands-off warning, the 'Lane Following Assist (LFA) canceled' warning message will appear and Lane Following Assist will be automatically canceled.

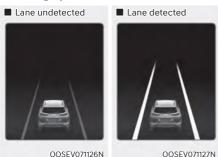
### A

#### WARNING

- The steering wheel may not be assisted if the steering wheel is held very tight or the steering wheel is steered over a certain degree.
- Lane Following Assist does not operate at all times. It is the responsibility of the driver to safely steer the vehicle and to maintain the vehicle in its lane.
- The hands-off warning message may appear late depending on road conditions. Always have your hands on the steering wheel while driving.
- If the steering wheel is held very lightly the hands-off warning message may appear because Lane Following Assist may not recognize that the driver has their hands on the steering wheel.
- If you attach objects to the steering wheel, the hands-off warning may not work properly.

### Information

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



- If lane markings are not detected, steering wheel control by Lane Following Assist can be limited depending on whether a vehicle is in front or the driving conditions of the vehicle.
- Even though the steering is assisted by Lane Following Assist, the driver may control the steering wheel.
- The steering wheel may feel heavier or lighter when the steering wheel is assisted by Lane Following Assist than when it is not.

#### Lane Following Assist **Malfunction and Limitations**

Lane Following Assist malfunction



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

#### Limitations of Lane Following Assist

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



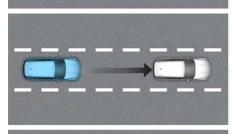
#### WARNING

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

#### **HIGHWAY DRIVING ASSIST (HDA) (IF EQUIPPED)**

#### **Basic function**

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



### Information

Highway Driving Assist is available only on controlled access road of certain highways.

\* Controlled access road indicates roads with limited entrances and exits that allow uninterrupted high speed traffic flow. Only passenger cars and motorcycles are allowed on controlled access roads.

#### **Detecting sensor**





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

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



### ! CAUTION

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

#### Highway Driving Assist Settings Setting features



#### **Basic function**

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

 If 'Highway Driving Assist' is selected, it helps maintain distance from the vehicle ahead, maintain the set speed, and helps center the vehicle in the lane.

### *i* Information

- If there is a problem with the functions, the settings cannot be changed. Have the function inspected by an authorized HYUNDAI dealer.
- If the vehicle is restarted, the functions will maintain the last setting.



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



#### **Warning Volume**

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

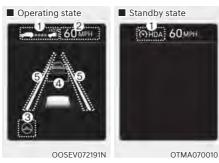
If you change the Warning Volume, the warning volume of other Driver Assistance systems may change.

## Highway Driving Assist Operation

#### Displaying operating status

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

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



- Highway Driving Assist indicator, whether there is a vehicle ahead and the selected distance level.
  - \* Highway Driving Assist indicator
  - Green HDA: Operating state
  - White HDA blink: Accelerator depressed state
- (2) Set speed.
- (3) Lane Following Assist indicator.
- (4) Whether there is a vehicle ahead and the selected headway.
- (5) Whether the lane is detected or not.

## *i* Information

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

#### **Operating conditions**

Highway Driving Assist operates when:

- Driving on the main road of highways, and turning on Highway Driving Assist by pressing the Driving Assist (F<sub>0</sub>)button.
- Entering the main road of highways while Lane Following assist and Smart Cruise Control are operating

### *i* Information

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

#### Restarting after stopping



When Highway Driving Assist is operating, your vehicle will stop if the vehicle ahead of you stops. Also, if the vehicle ahead of you starts moving within 30 seconds after the stop, your vehicle will start as well. In addition, after the vehicle has stopped and 30 seconds have passed, the 'Use switch or pedal to accelerate' message will appear on the cluster. Depress the accelerator pedal or operate the + switch, - switch or II 3 switch to start driving.

#### · Hands-off warning



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If the driver takes their hands off the steering wheel for several seconds. the 'Keep hands on the steering wheel' warning message will appear and an audible warning will sound in stages. First stage: Warning message Second stage: Warning message (red steering wheel) and

audible warning



If the driver still does not have their hands on the steering wheel after the hands-off warning, the 'Highway Driving Assist (HDA) canceled' warning message will appear and Highway Driving Assist and Lane Change Assist will be automatically canceled.

#### **Highway Driving Assist standby**

When the Smart Cruise Control is temporarily canceled while Highway Driving Assist is operating, Highway Driving Assist will be in the standby state. At this time, Lane Following Assist will operate normally.

### **Highway Driving Assist Malfunction and Limitations**





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

### **MARNING**

- The driver is responsible for braking and safe driving.
- Always have your hands on the steering wheel while driving.
- Highway Driving Assist is a supplemental function that assists the driver in driving the vehicle and is not a complete autonomous driving system. Always check road conditions, and if necessary, take appropriate actions to drive safely.
- Always have your eyes on the road, and it is the responsibility of the driver to avoid violating traffic laws. The vehicle manufacturer is not responsible for any traffic violation or accidents caused by the driver.
- Highway Driving Assist may not be able to recognize all traffic situations. Highway Driving Assist may not detect possible collisions due to limitations of the function. Always be aware of the limitations of the function. Obstacles such as vehicles, motorcycles, bicycles, pedestrians, or unspecified objects or structures such as guardrails, tollgate, etc. that may collide with the vehicle may not be detected.
- Highway Driving Assist will turn off automatically under the following situations:
  - Driving on roads that Highway Driving Assist does not operate, such as a rest area, intersection, junction, etc.
  - The navigation does not operate properly such as when the navigation is being updated or restarted

- Highway Driving Assist may inadvertently operate or turn off depending on road conditions (navigation information) and surroundings.
- Lane Following Assist function may be temporarily disabled when the front view camera cannot detect lanes properly or the hands-off warning is on.
- You may not hear the warning sound of Highway Driving Assist if the surrounding is noisy.
- If the vehicle is driven at high speed above a certain speed at a curve, your vehicle may drive to one side or may depart from the driving lane.
- When you are towing a trailer or another vehicle, turn off Highway Driving Assist for safety reasons.
- The hands-off warning message may appear early or late depending on how the steering wheel is held or road conditions. Always have your hands on the steering wheel while driving.
- For your safety, please read the owner's manual before using the Highway Driving Assist.
- Highway Driving Assist will not operate when the vehicle is started, or when the detecting sensors or navigation is being initialized.

#### Limitations of Highway Driving Assist

Highway Driving Assist and Highway Lane Change Assist function may not operate normally, or may not operate under the following circumstances:

- The map information and the actual road is different because the navigation is not updated
- The map information and the actual road is different because of real-time GPS data or map information error
- The infotainment system is overloaded by simultaneously performing functions such as route search, video playback, voice recognition, etc.
- GPS signals are blocked in areas such as a tunnel
- The driver goes off course or the route to the destination is changed or canceled by resetting the navigation
- The vehicle enters a service station or rest area
- Android Auto or Car Play is operating
- The navigation cannot detect the current vehicle position (for example, elevated roads including overpass adjacent to general roads or nearby roads exist in a parallel way)
- White single dotted lane line or road edge cannot be detected
- The road is temporarily controlled due to construction, etc.
- There is no structure, such as a medium strip, guardrails, etc., on the road
- There is a changeable lane in the direction of lane change

### *i* Information

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

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

### *i* 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.

### **REAR VIEW MONITOR (RVM)**

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



#### **Detecting sensor**



[1]: Rear view camera

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

#### **Rear View Monitor Settings**

#### Camera settings

- You can change Rear View Monitor settings by pressing the setup icon (②) on the screen while the function is operating, or select 'Driver Assistance → Parking Safety → Camera Settings' from the Settings menu while the vehicle is ON.
- In the Display Contents, you can change settings for 'Rear View Parking Guidance', and in the Display Settings, you can change the screen's 'Brightness' and 'Contrast'.

### **Rear View Monitor Operation**

#### Operating button



Parking/View button

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

Press the button again to turn off the function.

#### Rear view

#### **Operating conditions**

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

#### Off conditions

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

#### Extended rear view monitor

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

#### **Operating conditions**

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

#### Off conditions

- When vehicle speed is above 6 mph (10 km/h), the rear view will turn off.
- Shift the gear to P (Park), the rear view will turn off.

#### Rear top view



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

## Rear View Monitor Malfunction And Limitations

#### Rear View Monitor malfunction

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

#### Limitations of Rear View Monitor

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

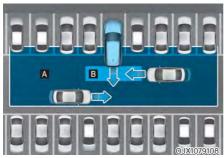


#### WARNING

- The rear view camera does not cover the complete area behind the vehicle. The driver should always check the rear area directly through the inside and outside rearview mirror before parking or backing up.
- The image shown on the screen may differ from the actual distance of the object. Make sure to directly check the vehicle's surroundings for safety.
- Always keep the rear view camera lens clean. If the lens is covered with foreign material, it may adversely affect camera performance and Rear View Monitor may not operate normally. However, do not use chemical solvents such as strong detergents containing high alkaline or volatile organic solvents (gasoline, acetone etc.). This may damage the camera lens.

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

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



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

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



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

#### **Detecting sensor**



[1]: Rear corner radar

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



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

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

#### Setting features



#### Rear Cross-Traffic Safety

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



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



#### **Warning Timing**

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

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



#### **Warning Volume**

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

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

### ! CAUTION

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

## *i* Information

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

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

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





#### **Collision Warning**

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

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



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





#### **Emergency Braking**

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

- Rear Cross-Traffic Collision-Avoidance Assist will operate when all the following conditions are satisfied:
  - The gear is shifted to R (Reverse)
  - Vehicle speed is below 5 mph (8 km/h)
  - The approaching vehicle is within approximately 5 ft. (1.5 m) from the left and right side of your vehicle
  - The speed of the vehicle approaching from the left and right is above 3 mph (5 km/h)
- Emergency braking will be assisted to help prevent collision with approaching vehicles from the left and right.



#### WARNING

Brake control ends when the conditions of the approaching vehicle from the rear left or right side are as below:

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



Stopping vehicle and ending brake control

- When the vehicle is stopped due to emergency braking, the 'Drive carefully' warning message will appear on the cluster.
- For your safety, the driver should depress the brake pedal immediately and check the surroundings.
- Brake control will end after the vehicle is stopped by emergency braking for approximately 2 seconds.
- During emergency braking, braking control by Rear Cross-Traffic Collision-Avoidance Assist will automatically cancel when the driver excessively depresses the brake pedal.

### WARNING

Take the following precautions when using Rear Cross-Traffic Collision-**Avoidance Assist:** 

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

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

#### ! CAUTION

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

There will only be a warning when:

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

### Information

If Rear Cross-Traffic Collision-Avoidance Assist assists you with braking, the drivers needs to depress the brake pedal and check vehicle surroundings.

- Brake control will end when the driver depresses the brake pedal with sufficient power.
- After shifting the gear to R (Reverse), braking control will operate once for left and right vehicle approach.

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

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



When Rear Cross-Traffic Collision-Avoidance Assist is not working properly, the 'Check Rear Cross-Traffic Safety system' warning message will appear on the cluster for several seconds, and the master (八) warning light will illuminate on the cluster. If the master warning light illuminates, have the vehicle inspected by an authorized HYUNDAI dealer.



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

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



OTM070124N

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

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

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

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

### **MARNING**

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

### **CAUTION**

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

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

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

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

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

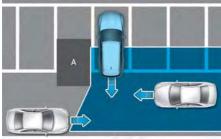
- The vehicle severely vibrates while driving over a bumpy road, uneven road or concrete patch
- Driving on a slippery surface due to snow, water puddle, ice, etc.
- The tire pressure is low or a tire is damaged
- · The brake is modified



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

### **MARNING**

· Driving near a vehicle or structure



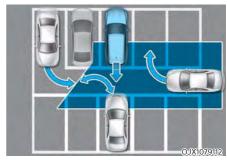
OJX1079111

[A]: Structure

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

Always check your surroundings while backing up.

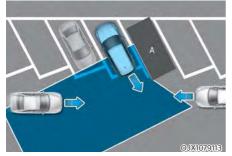
 When the vehicle is in a complex parking environment



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

Always check your surroundings while backing up.

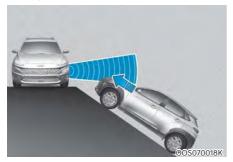
When the vehicle is parked diagonally



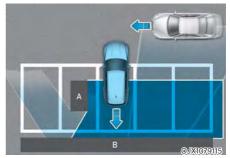
[A]: Vehicle

Rear Cross-Traffic Collision-Avoidance Assist may be limited when backing up diagonally, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary. Always check your surroundings while backing up.

When the vehicle is on or near a slope



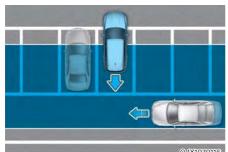
Rear Cross-Traffic Collision-Avoidance Assist may be limited when the vehicle is on a uphill or downhill slope, or near it, and may not detect the vehicle approaching from the left or right. If this occurs, the function may not warn the driver or control the brakes when necessary. Always check your surroundings while backing up.  Pulling into the parking space where there is a structure



[A]: Structure, [B]: Wall

Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by in front of you when parking in reverse into a parking space with a wall or structure in the rear or side area. If this occurs, the function may unnecessarily warn the driver and control the brake. Always check your surroundings while backing up.

When the vehicle is parked rearward



Rear Cross-Traffic Collision-Avoidance Assist may detect vehicles passing by behind you when parking in reverse into a parking space. If this occurs, the function may unnecessarily warn the driver and control the brake.

Always check your surroundings while backing up.

### **!** WARNING

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

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

### *i* 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.

•

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

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

#### **Detecting sensor**



[1]: Rear ultrasonic sensors

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

# Reverse Parking Distance Warning Settings

#### Warning Volume



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

# Reverse Parking Distance Warning Operation

#### Operating button



Parking Distance Warning Off button (if equipped)

- Press the Parking Distance Warning Off (P<sup>m</sup><sub>off</sub>) button to turn off Reverse Parking Distance Warning. Press the button again to turn on the function.
- When Reverse Parking Distance
  Warning is off (button indicator
  light on), if you shift the gear to R
  (Reverse), Reverse Parking Distance
  Warning will automatically turn on.

#### Reverse Parking Distance Warning

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

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

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

#### Reverse Parking Distance Warning Malfunction and Precautions

## Reverse Parking Distance Warning malfunction

After starting the vehicle, a beep will sound when the gear is shifted to R (Reverse) to indicate Reverse Parking Distance Warning is operating normally. However, if one or more of the following occurs, first check whether the ultrasonic sensor is damaged or blocked with foreign material. If it still does not work properly, have the vehicle inspected by an authorized HYUNDAI dealer.

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



### **MARNING**

- Reverse Parking Distance Warning is a supplemental function. The operation of Reverse Parking Distance Warning can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the rear view before and while parking.
- Your new vehicle warranty does not cover any accidents or damage to the vehicle due to the malfunction of Reverse Parking Distance Warning.
- Pay close attention when driving near objects, pedestrians, and especially children. Some objects may not be detected by the ultrasonic sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.

#### Limitations of Reverse Parking Distance Warning

- Reverse Parking Distance Warning may not operate properly when:
  - Moisture is frozen to the sensor
  - Sensor is covered with substance, such as snow or water (Reverse Parking Distance Warning will operate properly when such foreign Substance is removed.)
  - The weather is extremely hot or cold The sensor or sensor assembly is disassembled
  - The surface of the sensor is pressed hard or hit with a hard object
  - The surface of the sensor is scratched with a sharp object
  - The sensors or its surrounding area is directly sprayed with high pressure washer
- Reverse Parking Distance Warning may malfunction when:
  - Heavy rain or water spray is present
  - Water flows on the surface of the sensor
  - Affected by another vehicle's sensors
  - The sensor is covered with snow or ice
  - Driving on uneven road, gravel roads or bushes
  - Objects that generate ultrasonic waves are near the sensor
  - License plate is installed in a different spot from the original location
  - The vehicle bumper height or ultrasonic sensor installation has been modified
  - Attaching equipments or accessories next to the ultrasonic sensors

- The following objects may not be detected:
  - Sharp or small objects, such as ropes, chains or small poles.
  - Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
  - Objects smaller than 40 inches (100 cm) in length and narrower than 6 inches (14 cm) in diameter.
  - Pedestrians, animals or objects that are very close to the ultrasonic sensors
- Parking Distance Warning Indicators may be displayed differently from the actual detected location when the obstacle is located between the sensors.
- Parking Distance Warning indicator may not occur sequentially depending on vehicle speed or obstacle shape.
- If Reverse Parking Distance Warning needs repair, have the vehicle inspected by an authorized HYUNDAI dealer.

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

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

#### **Detecting sensor**





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

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

# Forward/Reverse Parking Distance Warning Settings Warning Volume



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

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

#### Parking Distance Warning Auto On

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

# Forward/Reverse Parking Distance Warning Operation Operating button



#### **Parking Safety button**

- Press the Parking Safety (Power by Distance Warning. Press the button again to turn off the function.
- When Forward/Reverse Parking Distance Warning is off (button indicator light off), if you shift the gear to R (Reverse), Forward/Reverse Parking Distance Warning will automatically turn on.
- When Forward/Reverse Parking
   Distance Warning turns on, the button
   indicator light will turn on. If vehicle
   speed is above 18 mph (30 km/h),
   Forward/Reverse Parking Distance
   Warning will turn off (button indicator
   light off).

#### Forward Parking Distance Warning

- Forward Parking Distance Warning will operate when one of the condition is satisfied.
  - The gear is shifted from R (Reverse) to D (Drive) with Reverse Parking Distance Warning on
  - The gear is in D (Drive) and the Parking Safety button indicator light is on
  - 'Parking Distance Warning Auto On' is selected from the Settings menu and the gear is in D (Drive)
- Forward Parking Distance Warning detects a person, animal or object in front when the vehicle's forward speed is below 6 mph (10 km/h).
- Forward Parking Distance Warning does not operate when the vehicle's forward speed is above 6 mph (10 km/h) even when the Parking Safety button indicator is on. Forward Parking Distance Warning will operate again when the vehicle's forward speed decreases below 6 mph (10 km/h) while the Parking Safety button indicator is on.
- When 'Parking Distance Warning Auto On' is selected, the Parking Safety button indicator light stays on.
- When 'Parking Distance Warning Auto On' is deselected, and the vehicle's forward speed is above 12 mph (20 km/h), the Parking Safety button indicator will turn off. Although you drive below 6 mph (10 km/h), Forward Parking Distance Warning will not turn on.

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

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

#### Reverse Parking Distance Warning

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

Distance from object	Warning indicator when driving backward	Warning sound
24~48 in. (60~120 cm)		Buzzer beeps intermittently
12~24 in. (30~60 cm)	1	Beeps more frequently
Within 12 in. (30 cm)		Beeps continuously

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

# Forward/Reverse Parking Distance Warning Malfunction and Precautions

## Forward/Reverse Parking Distance Warning malfunction

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

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

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



## **MARNING**

- Forward/Reverse Parking Distance Warning is a supplemental function. The operation of Forward/Reverse Parking Distance Warning can be affected by several factors (including environmental conditions). It is the responsibility of the driver to always check the front and rear views before and while parking.
- Your new vehicle warranty does not cover any accidents or damage to the vehicle due to the malfunction of Forward/Reverse Parking Distance Warning.
- Pay close attention when driving near objects, pedestrians, and especially children. Some objects may not be detected by the ultrasonic sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.

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

- Forward/Reverse Parking Distance Warning may not operate normally when:
  - Moisture is frozen to the sensor
  - Sensor is covered with substance such as ice, snow or water, such as snow or water (Forward/ Reverse Parking Distance Warning will operate properly when such substance is removed.)
  - The weather is extremely hot or cold
  - The sensor or sensor assembly is disassembled
  - The surface of the sensor is pressed hard or hit by a hard object
  - The surface of the sensor is scratched with a sharp object
  - The sensors or its surrounding area is directly sprayed with high pressure washer
- Forward/Reverse Parking Distance Warning may malfunction when:
  - Heavy rain or water spray is present
  - Water flows on the surface of the sensor
  - Affected by another vehicle's sensors
  - The sensor is covered with snow
  - Driving on uneven road, gravel roads or bushes
  - Objects that generates ultrasonic waves are near the sensor
  - Installing the license plate differently from the original location
  - The vehicle bumper height or ultrasonic sensor installation has been modified
  - Attaching equipments or accessories around the ultrasonic sensors

- The following objects may not be detected:
  - Sharp or small objects, such as ropes, chains or small poles.
  - Objects, which tend to absorb sensor frequency, such as clothes, spongy material or snow.
  - Objects smaller than 40 in. (100 cm) in length and narrower than 6 in. (14 cm) in diameter.
  - Pedestrians, animals or objects that are very close to the ultrasonic sensors
- Parking Distance Warning Indicators may be displayed differently from the actual detected location when the obstacle is located between the sensors.
- Parking Distance Warning indicator may not occur sequentially depending on vehicle speed or obstacle shape.
- If Forward/Reverse Parking Distance Warning needs repair, have the vehicle inspected by an authorized HYUNDAI dealer.

#### **DECLARATION OF CONFORMITY (IF EQUIPPED)**

#### **Front Radar**

The radio frequency components complies:

For USA



#### FCC ID: NF3-MRREVO14F

The manual should contain the following text: User manual statement according to \$15.19:

#### NOTICE:

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.

User manual statement according to §15.21:

Changes or modifications made to this equipment not expressly approved by Robert BOSCH GmbH may void the FCC authorization to operate this equipment.

OANATEI 182

User manual statements according to §15.105:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial

environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

RF Exposure Information according 2.1091 / 2.1093 / KDB 447498 / OET bulletin 65:

#### Radiofrequency 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 20 cm between the radiator and your body.

This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

OANATEL183

#### For Canada

Model: MRRevo14F IC: 3887A-MRREVO14F

The manual should contain the following text:

User manual statement according to RSS-GEN

#### NOTICE:

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device must not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

OANATEL184

RF Exposure Information according to RSS-102

#### Radiofrequency radiation exposure Information:

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. Ce transmetteur ne doit pas etre place au meme endroit ou utilise simultanement avec un autre

transmetteur ou antenne.

OANATEL185

#### **Rear Corner Radar**

 United States & U.S. territory, Micronesia, Dominican Republic and Honduras



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

#### For Canada

Model: RS4 IC: 2694A – RS4

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.:
- Le pr appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autoris aux deux conditions suivantes:
- (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radio subi, m si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Cet est conforme aux limites d'exposition aux rayonnements ISED pour un environnement non contr. Cet doit install et utilis avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps. Ce transmetteur ne doit pas etre place au meme endroit ou utilise simultanement avec un autre transmetteur ou antenne.

OANATEL307

# **8. Emergency Situations**

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#### HAZARD WARNING FLASHER



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 with the START/STOP button in any position. The button is located in the center fascia panel. All 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 the Vehicle Stalls While Driving

- Reduce your speed gradually, keeping a straight line. Move cautiously off the road to a safe place.
- Turn on your hazard warning flasher.
- Try to start the vehicle again. If your vehicle will not start, contact an authorized HYUNDAI dealer.

## If the Vehicle Stalls at a Crossroad or Crossing

If the vehicle stalls at a crossroads or crossing, if safe to do so, move the shift lever to the N (Neutral) position and then push the vehicle to a safe location.

# If You Have a Flat Tire While Driving

If a tire goes flat while you are driving:

- Take your foot off the accelerator pedal and let the vehicle slow down while driving straight ahead. Do not apply the brakes immediately or attempt to pull off the road as this may cause loss of vehicle control resulting in an accident. 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.
- When the vehicle is stopped, press the hazard warning flasher button, shift to P (Park), apply the parking brake, and place the START/STOP button in the OFF position.
- 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.
- When changing a flat tire, follow the instructions provided later in this chapter.

# IF THE VEHICLE WILL NOT START

# Confirm the EV Battery is Not Low On the Charge Gauge

- Be sure the gear is in P (Park). The vehicle starts only when the gear is in P (Park).
- Check the 12-volt battery connections to be sure they are clean and tight.
- Turn on the interior light. If the light dims or goes out when you operate the starter, the 12V battery is drained.

Do not push or pull the vehicle to start it. This could cause damage to your vehicle.

See instructions for "Jump Starting" provided in this chapter.

#### **JUMP STARTING (12V BATTERY)**

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.



#### 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.



Hydrogen is always present in battery cells, is highly combustible, and may explode if ignited.



Keep batteries out of reach of children.



Batteries contain sulfuric acid which is highly corrosive. Do not allow acid to contact your eyes, skin or clothing.

If acid gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If acid gets on your skin, thoroughly wash the area. If you feel pain or a burning sensation, get medical attention immediately.

- When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak. Lift with a battery carrier or with your hands on opposite corners.
- Do not attempt to jump start your vehicle if your battery is frozen.
- NEVER attempt to recharge the battery when the vehicle's battery cables are connected to the battery.
- The electrical ignition system works with high voltage. NEVER touch these components with the ( ) indicator ON or when the START/ STOP button is in the ON position.
- Do not allow the (+) and (-) jumper cables to touch. It may cause sparks.
- The battery may rupture or explode when you jump start with a low or frozen battery.

#### 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.



#### **WARNING**

While jump starting your vehicle, avoid the positive (+) and negative (-) cables to come in contact. A spark could cause personal injury.



#### Information



Pb

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

#### Jump starting procedure

- Position the vehicles close enough that the jumper cables will reach, but do not allow the vehicles to touch.
- Avoid fans or any moving parts in the motor compartment at all times, even when the vehicles are turned off.
- Turn off all electrical devices such as radios, lights, air conditioning, etc. Put the vehicles in P (Park) and set the parking brakes. Turn both vehicles OFF.

### **CAUTION**

Before jump starting, make sure to correctly identify the positive (+) and negative (-) terminals to avoid reverse polarity connections.



- 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).
- Connect the other end of the jumper cable to the red, positive (+) battery/ jumper terminal of the assisting vehicle (2).
- Connect the second jumper cable to the black, negative (-) battery/ chassis ground of the assisting vehicle (3).

 Connect the other end of the second jumper cable to the black, negative (-) battery/jumper terminal 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.

### **MARNING**

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.

 Start the motor of the assisting vehicle and let it run at approximately 2,000 rpm for a few minutes. Then start your vehicle.

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:

- Disconnect the jumper cable from the black, negative (-) chassis ground of your vehicle (4).
- Disconnect the other end of the jumper cable from the black, negative (-) battery/chassis ground of the assisting vehicle (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).

#### **TIRE PRESSURE MONITORING SYSTEM (TPMS)**





- (1) Low Tire Pressure Telltale/TPMS
  Malfunction Indicator
- (2) Low tire pressure position telltale (Shown on the LCD display)

#### **Check Tire Pressure (if equipped)**



- You can check the tire pressure in the Assist mode on the cluster.
  - Refer to the "LCD Display Modes" in chapter 4.
- Tire pressure is displayed after a few minutes of driving after initial vehicle start up.
- If tire pressure is not displayed when the vehicle is stopped, "Drive to display" message will appear. After driving, check the tire pressure.
- The displayed tire pressure values may differ from those measured with a tire pressure gauge.
- You can change the tire pressure unit in the User Settings mode on the instrument cluster.
- psi, kpa, bar (Refer to "User Settings Mode" in chapter 4).

#### **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 electric energy 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.

- The low tire pressure telltale/TPMS
  malfunction indicator does not
  illuminate for 3 seconds when the
  START/STOP button is turned to the
  ON position or the Vehicle is ON
  ( indicator ON).
- The TPMS malfunction indicator remains illuminated after blinking for approximately 1 minute.
- 3. The Low tire pressure position telltale remains illuminated.



#### **Low Tire Pressure Telltale**



**Low Tire Pressure** Position Telltale and **Tire Pressure Telltale** 

OOSEV048111L

When the tire pressure monitoring system warning indicators are illuminated and a warning message displayed on the cluster LCD display, one or more of your tires is significantly under-inflated. The low tire pressure position telltale light will indicate which tire is significantly under-inflated by illuminating the corresponding position light.

If either telltale illuminates, 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.

If you cannot reach a service station or if the tire cannot hold the newly added air, replace the low pressure tire with a spare tire.

If you drive the vehicle for about 10 minutes at speeds above 15.5 mile after replacing the low pressure tire with the spare tire, the following will happen:

The TPMS malfunction indicator may blink for approximately 1 minute and then remain continuously illuminated because the TPMS sensor is not mounted on the spare wheel.



#### ! CAUTION

In winter or cold weather, the low tire pressure telltale may illuminate if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean vour TPMS is malfunctioning because the decreased temperature leads to a 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 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.



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.

#### NOTICE

If there is a malfunction with the TPMS, the Low Tire Pressure Position Telltale will not be displayed even though the vehicle has an under-inflated tire.

#### 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 telltales will come on. Have the flat tire repaired by an authorized HYUNDAI dealer as soon as possible or replace the flat tire with the spare tire.



#### CAUTION

It is recommended that you do not 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 Telltale and TPMS Malfunction Indicator will go off within a few minutes of driving.

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 have your tires serviced by an authorized HYUNDAI dealer.

If the indicators do not extinguish after a few minutes, visit an authorized HYUNDAI dealer.

You may not be able to identify a tire with low pressure by simply looking at it. Always use a good quality tire pressure gauge to measure. 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 and with light force, and slowly move to a safe position off the road.

### **MARNING**

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.

## **⚠** WARNING

This device complies with Part 15 of the FCC rules.

Operation is subject to the following three conditions:

- This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.
- 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 have the system inspected by an authorized HYUNDAI dealer.



#### CAUTION

When two or more tires are flat, do not use the tire mobility kit because the supported one sealant of Tire Mobility Kit is only used for 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 loose 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 system of compressor and sealing compound effectively and comfortably seals most punctures in a passenger car tire caused by nails or similar objects and reinflates the tire.

After you ensured that the tire is properly sealed you can drive cautiously on the tire (distance up to 120 mile (200 km)) at a max. speed of 50 mph (80 km) in order to reach a service station or tire dealer to have the tire replaced.

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".

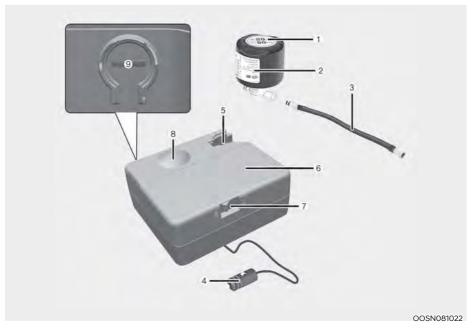


#### **WARNING**

Do not use the TMK if a tire is severely damaged by driving run flat or with insufficient air pressure.

Only punctured areas located within the tread region of the tire can be sealed using the TMK.

#### **Components of the Tire Mobility Kit**



- 1. Speed-restriction label
- 2. Sealant bottle and label with speed restriction
- 3. Filling hose
- 4. Connectors and cable for the 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 the 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.



#### **Expired sealant**

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.



#### Sealant

- Keep out of reach of children.
- Avoid contact with eyes.
- Do not swallow.

#### **Using the Tire Mobility Kit When** a tire is flat





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.



#### **CAUTION**

If only the tire pressure needs to be adjusted, refer to "How to Adjust Tire Pressure" in this chapter.

Before using the Tire Mobility Kit, be fully aware of the explanation on the sealant.

1. Shake the sealant bottle (2).



- 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.
- 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.



5. Plug the compressor power cord (4) into the vehicle power outlet.

#### NOTICE

Only use the front passenger side power outlet when connecting the power cord.

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.



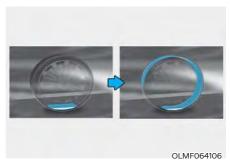
#### CAUTION

#### Tire pressure

Do not attempt to drive your vehicle if the tire pressure is below 200 kPa (29 psi). 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

Return the Tire Mobility Kit to its storage location in the vehicle.



 Immediately drive approximately 4~6 miles (7~10 km or, about 10min) 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.

Call for road side service or towing.





- 10. After driving approximately 4~6 miles (7~10 km or about 10 min ), stop at a safety location.
- 11. Connect the filling hose (3) of the compressor directly to the tire valve.
- 12. Plug the compressor power cord into the vehicle power outlet.
- 13. Adjust the tire inflation pressure to the recomended tire inflation.

With the Vehicle is ON ( findicator 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.

#### NOTICE

Do not let the compressor run for more than 10 minutes, otherwise the device will overheat and may be damaged.



#### Information

The pressure gauge may show higher than actual reading when the compressor is running. To get an accurate tire reading, the compressor needs to be turned off.



#### CAUTION

If the inflation pressure is not maintained, drive the vehicle a second time, refer to step 9.

Then repeat steps 10 to 13.

Use of the TMK may be ineffectual for tire damage larger than approximately 4 mm (0.16 in).

Contact an authorized HYUNDAI dealer if the tire cannot be made roadworthy with the Tire Mobility Kit.



#### WARNING

The tire inflation pressure must be at least 220 kPa (32 psi). If it is not, do not continue driving.

Call for road side service or towing.



#### CAUTION

Tire pressure sensor (if equipped with TPMS)

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. Get this done at an authorized HYUNDAI dealer.



#### Information

When reinstalling the repaired or replaced tire and wheel on the vehicle, tighten the wheel lug nut to 11~13 kgf·m (79~94 lbf·ft).

#### **How To Adjust Tire Pressure**





- 1. Park your vehicle in a safe location.
- 2. Connect the filling hose (3) of the compressor directly to the tire valve.
- 3. Plug the compressor power cord into the vehicle power outlet.
- 4. Adjust the tire inflation pressure to the recomended tire inflation.

With the Vehicle is ON ( indicator 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.

#### NOTICE

Do not let the compressor run for more than 10 minutes, otherwise the device will overheat and may be damaged.



#### Information

The pressure gauge may show higher than actual reading when the compressor is running. To get an accurate tire reading, the compressor needs to be turned off.



#### **CAUTION**

Do not use the sealant when the tire pressure only needs to be adjusted.



#### WARNING

The tire inflation pressure must be at least 220 kPa (32 psi). If it is not, do not continue driving.

Call for road side service or towing.

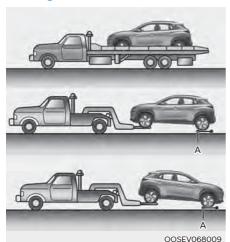
# Notes on the Safe Use of the Tire Mobility Kit

- 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 6 mm (0.24 in).
- If the tire cannot be made roadworthy with the Tire Mobility Kit, contact an authorized HYUNDAI dealer.
- 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 is 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 min. at a time or it may overheat.
- Do not use the Tire Mobility Kit if the ambient temperature is below -30°C (-22°F).
- In case of skin contact with the sealant, wash the area thoroughly with plenty of water. If the irritation persists, seek medical attention.
- In case of eye contact with the sealant, flush your eyes for at least 15 minutes. If the irritation persists, seek medical attention.
- In case of swallowing the sealant, rinse the mouth and drink plenty of water. However, never give anything to an unconscious person and seek medical attention immediately.
- Long time exposure to the sealant may cause damage to bodily tissue such as kidney, etc.

#### **TOWING**

#### **Towing Service**



[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.

## **A** CAUTION

 Do not tow the vehicle with the front wheels on the ground as this may cause damage to the vehicle.



Do not tow with sling-type equipment. Use wheel lift or flatbed equipment.



When towing your vehicle in an emergency without wheel dollies:

- 1. While depressing the brake pedal shift to the N (Neutral) position and turn the vehicle off. The START/STOP button will be in the ACC position.
- 2. Release the parking brake.



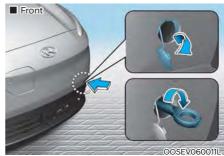
#### **CAUTION**

Failure to place the shift lever in N (Neutral) may cause internal damage to the vehicle.

#### **Removable Towing Hook**



 Open the liftgate, and remove the towing hook from the tool case. The tool case is placed under the luggage tray.





- 2. Remove the hole cover pressing the lower part of the cover on the bumper.
- 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**

If towing is necessary, have it done by an authorized HYUNDAI dealer or a commercial tow truck service.

If a 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.

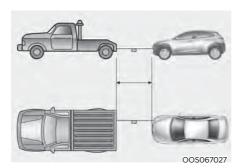


#### CAUTION

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.

Always follow these emergency towing precautions:

- While depressing the brake pedal shift to the N (Neutral) position and turn the vehicle off. The START/STOP button will be in the ACC position.
- · Release the parking brake.
- Depress the brake pedal with more force than normal as 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.



- Use a towing cable or chain less than 5 m (16 feet) long. Attach a white or red cloth (about 30 cm (12 inches) 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 fluid 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/h) when towing to avoid serious damage to reduction gear.

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# **MOTOR COMPARTMENT**



- 1. Coolant reservoir
- 2. Brake fluid reservoir
- 3. Fuse box

- 4. Battery (12 volt)
- 5. Coolant reservoir cap
- 6. Windshield washer fluid reservoir

# **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.

# **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 retailer of Genesis Branded products 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.

# 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 servicing or maintenance procedure, have the system serviced by an authorized HYUNDAI dealer.

#### **OWNER MAINTENANCE**



# ! 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 the system serviced by an authorized HYUNDAI dealer, ALWAYS follow these precautions for performing maintenance work:

- Park your vehicle on level ground, shift to P (Park) position, apply the parking brake, place the START/STOP 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 and motor related parts.

The following lists are vehicle checks and inspections that should be checked by 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 charging:

- · Check the coolant level in the coolant reservoir.
- · Check the windshield washer fluid level
- Check for low or under-inflated tires.



# **WARNING**

Be careful when checking your coolant level if the motor compartment is hot. This may result in coolant being blown out of the opening and cause serious burns and other injuries.

#### 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 "hardto-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 stoplights, turn signals and hazard warning flashers.
- Check the inflation pressures of all tires including the spare for tires that are worn, show uneven wear, or are damaged.
- Do not add regular green coolant.

- At least twice a year: (for example, every Spring and Autumn)
- Check radiator, heater and air conditioning hoses for leaks or damage.
- Check windshield washer spray and wiper operation. Clean wiper blades with a 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.
- Check the air conditioning system.
- Inspect and lubricate reduction gear linkage and controls.
- · Clean the battery and terminals.
  - 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 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) or frequent rapid acceleration/deceleration
- 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.

# NOTICE

After 10 years or 100,000 miles, use severe maintenance schedule.

# Normal Maintenance Schedule

Keep receipts for all vehicle services to protect your warranty. Where both mileage and time are shown, the frequency of The following maintenance services must be performed to ensure good vehicle performance.

MAINTENANCE	Months	4	ω -	12	9	0	4 2	ω ω	16         20         24         28         32         36         40         44         48         52         56         60         64         68         72         76         80         84         88	40	44	48	52	56	09	64	89	72	9/	08	84		95 96	ဖွ
	Miles×1,000	D.	10	5 2	0 2	15 20 25 30	ю́ О	5 4	35 40 45 50 55	20	55		65	70	75	80	85	06	95 1	00	60 65 70 75 80 85 90 95 100 105 110	10 1	115 120	0
ITEM	Km×1,000	ω	16 24		12 4	4	· Ω	9	32 40 48 56 64 75 80 88 96 104 112 120 128 136 144 152 160 168 176 184 192	80	88	96	104	112	120	128	. 981	144	152 1	60 1	168	76 18	34 1	32
Cooling system								Ins	nspect every 15,000 miles or 12 months	evel	ry 15	00,	) mi	les c	or 12	ШO	nths							
Rotate Tires (Includes Tire Pressure and Tread Wear Inspection)								ă.	Rotate every 5,000 miles (8,000 km)	eve	ery E	00,0	0 mi	les (	8,00	) 0 k	Ē							
Replace Climate Control Air Filter (For Evanorator and							<u> </u>		~			~			~			~			~			_ a
Blower Unit)				_		-	,					_			<u> </u>			<u> </u>						,
Coolant *1						Re	plac	e ev	Replace every 35,000 miles (60,000 km) or 36 months	35,0	00	nile	9) (	00'	0 kn	יס (ר	36	mor	ıths					
12V auxiliary battery condition				_		_			_			_			_			_			_			_
Brake lines, hoses, and connections	ctions					_			_			_			_			_			_			_
Disc brakes and pads						_			_			_						_			_			_

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

\*1: When replacing or adding coolant, visit an authorized HYUNDAI dealer.

# Normal Maintenance Schedule

MAINTENANCE	Months	4	ω	72	91	0	4 2	8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96	36	40	44	48	52	26	09	64	89	72	9/	80	84	88	92	96
	Miles×1,000	5         10         15         20         25         30         35         40         45         50         55         60         65         70         75         80         85         90         95         100         105         110         115         120	5	75	02	3	0	72	4	20	22	09	65	02	75	80	85	06	95	001	105	10	15	120
ITEM	Km×1,000	ω	16	24	32 4	0.4	κό τυ	8 16 24 32 40 48 56 64 75 80 88 96 104 112 120 128 136 144 152 160 168 176 184 192	4 7.5	80	88	96	104	112	120	128	136	144	152	. 091	. 891	1 9/1	84	192
Steering gear rack, linkage, and boots				_					_			_			_			_			_			_
Drive shafts and boots				_			_		_			_			_			_			_			_
Air conditioning compressor, air conditioner refrigerant and performance				_			_		_			_			_			_			_			_
Reduction gear fluid								_						_							_			
Brake pedal				_					_			_			_			_			_			_
Brake fluid						Re	nspe plac	Inspect every 7,500 miles (12,000 km) or 12 months, Replace every 60,000 miles (96,000 km) or 48 months	ver) rery	7,5( 60,0	л 00 100 г	niles mile	(12, s (9(	000 3,00	A O	) or ' n) o	12 m r 48	ont	ns, nths					

I: Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

# **Maintenance Under Severe Usage Conditions**

The following items must be serviced more frequently on cars mainly used under severe driving conditions.

Refer to the chart below for the appropriate maintenance intervals.

R: Replace I: Inspect and if necessary, adjust, correct, clean or replace

Maintenance item	Maintenance operation	Maintenance intervals	Driving condition
Reduction gear fluid	R	Every 80,000 miles (120,000 km)	C, D, E, F, G, H, I, J
Steering gear rack, linkage and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G
Front suspension ball joints	I	Inspect more frequently depending on the condition	C, D, E, F, G
Disc brakes and pads, calipers and rotors	I	Inspect more frequently depending on the condition	C, D, E, G, H
Driveshaft and boots	I	Inspect more frequently depending on the condition	C, D, E, F, G, H, I, J
Climate control air filter	R	Replace more frequently depending on the condition	C, E, G

## Severe driving conditions

- A. Repeatedly driving short distance of less than 5 miles (8 km) in normal temperature or less than 10 miles (16 km) in freezing temperature
- B. 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 heavy dust condition
- F. Driving in heavy traffic area
- G. Driving on uphill, downhill, or mountain roads repeatedly
- 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

# *i* Information

After driving more than 10 years or 100,000 miles, use severe maintenance schedule.

#### **EXPLANATION OF SCHEDULED MAINTENANCE ITEMS**

# **Cooling System**

Check the cooling system parts, 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**

The reduction gear fluid should be inspected according to the intervals specified in 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 the brake fluid level in the brake fluid reservoir. The level should be between "MIN" and "MAX" marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

# **Brake Pads, Calipers and Rotors**

Check the pads for excessive wear, discs for run out and wear, and calipers for fluid leakage.

For more information on checking the pads or lining wear limit, refer to the HYUNDAI web site.

(http://service.hyundai-motor.com)

# **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, check for excessive free-play in the steering wheel.

Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage. 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/ Compressor

Check the air conditioning lines and connections for leakage and damage.

#### COOLANT



Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses.

The coolant level should be filled between the MAX and the MIN marks on the side of the coolant reservoir when the parts in the motor compartment is cool.

If the coolant is low, have the vehicle inspected by an authorized HYUNDAI dealer.

Use only designated coolant water for electric vehicles, adding other types of water or antifreeze can damage the vehicle.



# WARNING

Since specific coolant water (Blue color, Low conductivity) is applied for electric vehicles, replenishment of other antifreeze or water may cause problems to the vehicle.

Do not mix with normal green coolant.



# 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 vehicle coolant temperature, refrigerant pressure and vehicle speed. As the vehicle coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition.

#### **BRAKE FLUID**

# **Checking the Brake Fluid Level**



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 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 system checked by an authorized HYUNDAI dealer.

# *i* Information

- Use only the specified brake fluid.
   Refer to "Recommended lubricants and capacities" in chapter 2.
- Before removing the brake filler cap, read the warning on the cap.
- Clean the filler cap before removing. Use only DOT3 or DOT4 brake fluid from a sealed container.

# **MARNING**

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.

# **MARNING**

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.
- Don't put in the wrong type of fluid.
   A few drops of mineral-based oil in your brake system can damage system parts.

#### **WASHER FLUID**

# **Checking the Washer Fluid Level**



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.

# **MARNING**

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 flames 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 poisonous to humans and animals.
- Keep washer fluid away from children and animals.

# **CLIMATE CONTROL AIR FILTER**

# **Filter Inspection**

Replace the filter according to the Maintenance Schedule.

If the vehicle is operated in the severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you, the owner, replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.

# **Filter Replacement**



1. With the glove box open, remove the stoppers on both sides.

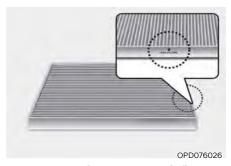


2. Remove the support strap (1).



- Remove the climate control air filter case while pressing the lock on the right side of the cover.
- 4. Replace the climate control air filter.
- 5. Reassemble in the reverse order of disassembly.

# NOTICE



Install a new climate control air filter in the correct direction with the arrow symbol (4) facing downwards, otherwise, it may be noisy and the effectiveness of the filter may be reduced.

## **WIPER BLADES**

# **Blade Inspection**

Contamination of either the windshield or the wiper blades with foreign matter can reduce the effectiveness of the windshield wipers.

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 good cleaner or mild detergent, and rinse thoroughly with clean water.

# 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.

# *i* Information

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

# *i* Information

Wiper blades are a consumable item and normal wear of the wipers may not be covered by your vehicle warranty.

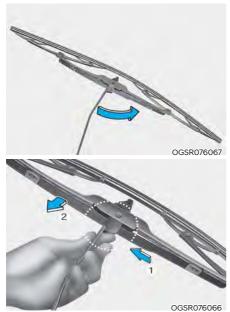
# **Blade Replacement**

When the wipers no longer clean adequately, the blades may be worn or cracked, and require replacement.

# NOTICE

- In order to prevent damage to the hood and the wiper arms, the wiper arms should only be lifted when in the top wiping position.
- Always return the wiper arms to the windshield before driving.

Type A



- 1. Lift up the wiper blade clip. Then lift up the wiper blade.
- 2. While pushing the lock (1), pull down the wiper blade (2).

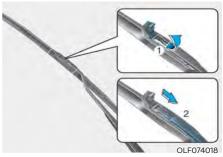


- 3. Remove the wiper blade from the wiper arm.
- 4. Install a new wiper blade assembly in the reverse order of removal.
- 5. Return the wiper arm on the windshield.

Type B



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.

# Rear window wiper blade



1. Raise the wiper arm and pull out the wiper blade assembly.



- Install the new blade assembly by inserting the center part into the slot in the wiper arm until it clicks into place.
- Make sure the blade assembly is installed firmly by trying to pull it slightly.

To prevent damage to the wiper arms or other components, have the wiper blades replaced by an authorized HYUNDAI dealer.

# **BATTERY (12 VOLT)**



# ! 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 eve protection designed to protect the eyes from acid splashes.



Keep all flames, sparks, or smoking materials away from the battery.



Hydrogen is always present in battery cells, is highly combustible, and may explode if ignited.



Keep batteries out of reach of children.



Batteries contain sulfuric acid which is highly corrosive. Do not allow acid to contact your eyes, skin or clothing.

If acid gets into your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention. If acid gets on your skin, thoroughly wash the area. If you feel pain or a burning sensation, get medical attention immediately.

- When lifting a plastic-cased battery, excessive pressure on the case may cause battery acid to leak. Lift with a battery carrier or with your hands on opposite corners.
- Do not attempt to jump start your vehicle if your battery is frozen.
- NEVER attempt to recharge the battery when the vehicle's battery cables are connected to the battery.

 The electrical ignition switch works with high voltage. NEVER touch these components with the "="" indicator ON or when the START/ STOP button is in the ON position.



# **WARNING**

#### CALIFORNIA PROPOSITION 65 WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer. birth defects and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash hands after handling.

# NOTICE

Always follow these instructions when handling your vehicle's battery to prevent damage to your battery:

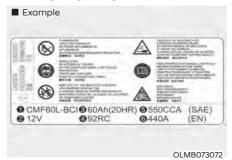
- When you do not use the vehicle for a long time in a low temperature area, disconnect the battery and keep it indoors.
- Always charge the battery fully to prevent battery case damage in low temperature areas.
- Prevent liquid from wetting the battery terminals. The performance of the battery may be degraded, and may cause injury. Be cautious when loading liquid in the trunk.
- Do not tilt the battery.
- · If you connect unauthorized electronic devices to the battery, the battery may be discharged. Never use unauthorized devices.

## Battery Usage Recommendations



- · Keep the battery securely mounted.
- · Keep the battery top clean and dry.
- Keep the terminals and connections clean, tight, and coated with petroleum jelly or terminal grease.
- Rinse any spilled electrolyte from the battery immediately with a solution of water and baking soda.
- If the vehicle is not going to be used for an extended time, disconnect the battery cables.

# **Battery Capacity Label**



The actual battery label in the vehicle may differ from the illustration.

- AGM60L-DIN: The HYUNDAI model name of battery
- 2. 12V: The nominal voltage
- 3. 60Ah(20HR): The nominal capacity (in Ampere hours)
- 4. 100RC : The nominal reserve capacity (in min.)
- 5. 640CCA: The cold-test current in amperes by SAE
- 6. 512A: The cold-test current in amperes by EN

# **Battery Recharging**

# By battery charger

Your vehicle has a maintenance-free, calcium-based battery.

Recharge the battery by a modern automatic regulated charger.

# WARNING

Always follow these instructions when recharging your vehicle's battery to avoid the risk of SERIOUS INJURY or **DEATH** from explosions or acid burns:

- Before performing maintenance or recharging the battery, turn off all accessories and place the START/ STOP button to the OFF position.
- Keep all flames, sparks, or smoking materials away from the battery.
- Always work outdoors or in an area with plenty of ventilation.
- · Wear eye protection when checking the battery during charging.
- The negative battery cable must be removed first and installed last when the battery is disconnected. Disconnect the battery charger in the following order:
  - (1) Turn off the battery charger main switch.
  - (2) Unhook the negative clamp from the negative battery terminal.
  - (3) Unhook the positive clamp from the positive battery terminal.
- Always use a genuine HYUNDAI approved battery or the equivalent specified for your vehicle when you replace the battery.

# 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 8 for more information on jump starting procedures.

# Information



An inappropriately disposed of battery can be harmful to the environment and human health.

Dispose of the battery according to your local law(s) or regulations.

#### Reset Items

The following items may need to be reset after the battery has been discharged or the battery has been disconnected.

- Auto up/down window
- Sunroof
- Trip computer
- Climate control system
- Clock
- Audio system

#### **TIRE AND WHEELS**



# ! 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.
- Check the pressure of the spare every time you check the pressure of the other tires on your vehicle.
- · Replace tires that are worn, show uneven wear, or are damaged. Worn tires 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 electric energy 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 (including the spare) should be checked when the tires are cold. "Cold tires" means the vehicle has not been driven for at least three hours or has been driven for less than 1 mile (1.6 km).

Warm tires normally exceed recommended cold tire pressures by 28 to 41 kPa (4 to 6 psi). Do not release air from warm tires to adjust the pressure or the tires will be under-inflated. For recommended inflation pressure, refer to "Tires and Wheels" in chapter 2.

# ! 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 electric energy 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, including the spare tire, 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 underinflated.

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.

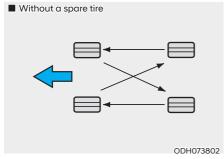
If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve 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 mile (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 the tire. Replace the tire if you find any 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 11~13 kgf·m [79~94 lbf·ft]).



Disc brake pads should be inspected for wear whenever tires are rotated.

# *i* Information

The outside and inside of the unsymmetrical tire is distinguishable. When installing an unsymmetrical tire, be sure to install the side marked "outside" facing the outside. If the side marked "inside" is installed on the outside, it will have a negative effect on vehicle performance.

# WARNING

- Do not use the compact spare tire for tire rotation.
- Do not mix bias ply and radial ply tires under any circumstances.
   This may cause unusual handling characteristics that may cause loss of vehicle control 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

Incorrect wheel weights can damage your vehicle's aluminum wheels. Use only approved wheel weights.

# **Tire Replacement**



[A]: Tread wear indicator

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 1.6 mm (1/16 in.) 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.

- 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. If only replacing one pair of tires, it is recommended to install the pair of new tires on the rear axle.
- 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.
- 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.



#### 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.)

#### 205/60 R16 92V

- 205 Tire width in millimeters.
- 60 Aspect ratio. The tire's section height as a percentage of its width.
- R Tire construction code (Radial).
- 16 Rim diameter in inches.
- 92 Load Index, a numerical code associated with the maximum load the tire can carry.
- V Speed Rating Symbol. See the speed rating chart in this section for additional information.

# Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

#### 6.5JX16

6.5 - Rim width in inches.

J - Rim contour designation.

16 - Rim diameter in inches.

#### Tire speed ratings

The chart below lists many of the different speed ratings currently being used for passenger vehicle 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)
Т	118 mph (190 km/h)
Н	130 mph (210 km/h)
V	149 mph (240 km/h)
W	168mph (270km/h)
Y	186mph (300km/h)

# 3. Checking tire life (TIN: Tire Identification Number)

Any tires that are over six years old, based on the manufacturing date, (including the spare tire) 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 shows a plant code number, tire size and tread pattern and the last four numbers indicate week and year manufactured.

# For example:

DOT XXXX XXXX 1522 represents that the tire was produced in the 15th week of 2022.

# 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. 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 automatic transmission, power seats, and air conditioning.

#### Aspect ratio

The relationship of a tire's height to its width.

#### **Belt**

A rubber coated layer of cords that is located between the plies and the tread. Cords may be made from steel or other reinforcing materials.

#### Bead

The tire bead contains steel wires wrapped by steel cords that hold the tire onto the rim.

## Bias ply tire

A pneumatic tire in which the plies are laid at alternate angles less than 90 degrees to the centerline of the tread.

#### Cold tire pressure

The amount of air pressure in a tire, measured in pounds per square inch (psi) or kilopascals (kPa) before a tire has built up heat from driving.

# **Curb** weight

This means the weight of a motor vehicle with standard and optional equipment including the maximum capacity of fuel, oil and coolant, but without passengers and cargo.

# **DOT** markings

A code molded into the sidewall of a tire signifying that the tire is in compliance with the U.S. Department of Transportation motor vehicle safety standards. The DOT code includes the Tire Identification Number (TIN), an alphanumeric designator which can also identify the tire manufacturer, production plant, brand and date of production.

#### **GVWR**

Gross Vehicle Weight Rating

#### **GAWR FRT**

Gross Axle Weight Rating for the Front Axle.

#### **GAWR RR**

Gross Axle Weight Rating for the Rear axle.

#### Intended outboard sidewall

The side of an asymmetrical tire, that must always face outward when mounted on a vehicle.

#### Kilopascal (kPa)

The metric unit for air pressure.

# Light Truck (LT) tire

A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

# Load ratings

The maximum load that a tire is rated to carry for a given inflation pressure.

#### Load index

An assigned number ranging from 1 to 279 that corresponds to the load carrying capacity of a tire.

# Maximum inflation pressure

The maximum air pressure to which a cold tire may be inflated. The maximum air pressure is molded onto the sidewall.

# Maximum load rating

The load rating for a tire at the maximum permissible inflation pressure for that tire.

# Maximum loaded vehicle weight

The sum of curb weight; accessory weight; vehicle capacity weight; and production options weight.

## Normal occupant weight

The number of occupants a vehicle is designed to seat multiplied by 150 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**

The aspect ratio is lower than 50 on low aspect ratio tires.

Because low aspect ratio tires are optimized for handling and braking, their sidewall is a little stiffer than a standard tire. Also, low aspect ratio tires tend to be wider so that they consequently have a greater contact patch with the road surface. In some instances, they may generate more road noise compared with standard tires.

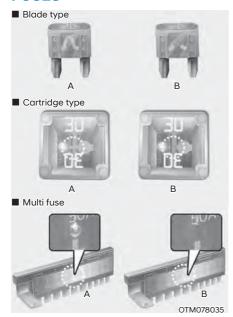


# ! CAUTION

The side wall of a low aspect ratio tire is shorter than the normal one. Thus, the low-aspect wheel and tire are easily damaged. Follow the below instructions.

- When driving on a rough road or driving off a road, be careful not to damage the tires and wheels. After driving, inspect the tires and wheels.
- When passing over a pothole, speed bump, manhole, or curb stone, drive the vehicle slowly so as not to damage the tires and wheels.
- When there is an impact on a tire, inspect the tire condition. Or, contact an authorized HYUNDAI dealer.
- Inspect the tire condition and pressure every 1,800 miles (3,000 km) to prevent tire damage.
- It is difficult to recognize a tire damage only with your eyes. When there is a slight hint of a tire damage, check and replace the tire to prevent the damage caused by air leakage.
- When a tire is damaged while driving on a rough road, off a road, or over obstacles, such as a pothole, manhole, or curb stone, your warranty does not cover the damage.
- The tire information is specified on the tire side wall.

#### **FUSES**



[A]: Normal, [B]: Blown

A vehicle's electrical system is protected from electrical overload damage by fuses.

This vehicle has 2 (or 3) fuse panels, one located in the driver's side panel bolster, the other in the motor compartment.

If any of your vehicle's lights, accessories, or controls do not work, check the appropriate circuit fuse. If a fuse has blown, the element inside the fuse 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 it is recommended to consult an authorized dealer.

# *i* 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.

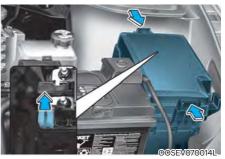
# NOTICE

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



- 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.



- 5. Pull the suspected fuse straight out. Use the removal tool provided in the motor compartment fuses panel.
- Check the removed fuse; replace it if it is blown. Spare fuses are provided in the instrument panel fuse panels (or in the motor compartment fuse panel).
- 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, such as the cigarette lighter fuse.

If the headlights or other electrical components do not work and the fuses are undamaged, check the fuse panel in the motor compartment. If a fuse is blown, it must be replaced with the same rating.

# Fuse switch



Always, place the fuse switch to the ON position.

If you move the switch to the OFF position, some items such as the audio system and digital clock must be reset and the smart key may not work properly.

# *i* Information



If the fuse switch is OFF, "Turn on FUSE SWITCH" message will appear.

# NOTICE

- Always place the fuse switch in the ON position while driving the vehicle.
- Do not move the transportation fuse switch repeatedly. The fuse switch may be damaged.

# Motor Compartment Panel Fuse Replacement





- 1. Turn the vehicle off.
- 2. Turn all other switches OFF.
- 3. Remove the fuse panel cover by pressing the tab and pulling up.
- Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the motor compartment fuse panel.
- 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.

#### NOTICE

After checking the fuse panel in the motor compartment, securely install the fuse panel cover. You may hear a clicking sound if the cover is securely latched. If it is not securely latched, electrical failure may occur from water contact.

#### Multi fuse



If the multi fuse is blown, it must be removed as follows:

- 1. Turn the vehicle off.
- 2. Disconnect the negative battery cable.
- 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.
- Reinstall in the reverse order of removal.

If the multi fuse is blown, consult an authorized HYUNDAI dealer.

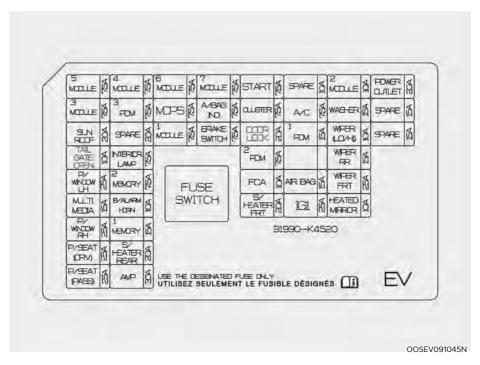
# Fuse/Relay Panel Description Driver's side fuse panel



Inside the fuse/relay box covers, you can find the fuse/relay label describing fuse/relay names and ratings.

# *i* Information

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse box on your vehicle, refer to the fuse box label.



#### Driver's side fuse panel

Fuse Name	Fuse Rating	Circuit Protected
MODULE 5	7.5A	Electro Chromic Mirror, Audio, A/V & Navigation Head Unit, Front Air Ventilation Seat Module, Front Seat Warmer Module, Data Link Connector, Rear Seat Warmer Control Module, Front Console Switch
MODULE 3	7.5A	Stop Lamp Switch, BCM, IAU
SUNROOF	20A	Sunroof Unit
LIFTGATE OPEN	10A	Tail Gate Relay
P/WINDOW LH	25A	Power Window LH Relay, Driver Safety Power Window Module
MULTI MEDIA	15A	Audio, A/V & Navigation Head Unit
P/WINDOW RH	25A	Power Window RH Relay, Passenger Safety Power Window Module
P/SEAT(DRV)	25A	Driver Seat Manual Switch, Driver Lumbar Support Switch
P/SEAT(PASS)	25A	Not Used
MODULE 4	7.5A	BCM, Crash Pad Switch, Front View Camera, Vess Unit (Speaker)
PDM 3	7.5A	Smart Key Control Module
SPARE	20A	Spare
INTERIOR LAMP	7.5A	Vanity Lamp LH/RH, Room Lamp, Foot Lamp LH/RH, Overhead Console Lamp, Luggage Lamp
MEMORY 2	7.5A	Vess Unit (Speaker), Electronic Refrigerant Reduced Pressure Valve, Rear Coner Radar LH/RH
B/ALARM HORN	10A	Not Used
MEMORY 1	15A	A/C Control Module, Head Up Display, Instrument Cluster, BCM, Rain Sensor, Electro Chromic Mirror, Wireless Charger Unit
S/HEATER REAR	20A	Rear Seat Warmer Control Module
AMP	30A	AMP
MODULE 6	7.5A	Smart Key Control Module, BCM, IAU
MDPS	7.5A	MDPS Unit
MODULE 1	7.5A	Active Air Flap, Hazard Switch, Data Link Connector

#### Driver's side fuse Panel

Fuse Name	Fuse Rating	Circuit Protected
MODULE 7	7.5A	Front Air Ventilation Seat Module, Front Seat Warmer Module, Rear Seat Warmer Control Module
A/BAG IND	7.5A	A/C Control Module
BRAKE SWITCH	7.5A	Stop Lamp Switch, Smart Key Control Module
START	7.5A	Smart Key Control Module, EPCU
CLUSTER	7.5A	Head Up Display, Instrument Cluster
DOOR LOCK	20A	Door Lock Relay, Door Unlock Relay, ICM Relay Box (Two Turn Unlock Relay)
PDM 2	7.5A	Driver/Passenger Smart Key Outside Handle, BLE Unit, IAU
FCA	10A	Front Radar Unit
S/HEATER FRT	20A	Front Seat Warmer Module, Front Air Ventilation Seat Module
SPARE	10A	Spare
A/C	7.5A	A/C Control Module
PDM 1	15A	Smart Key Control Module, Start/Stop Button
AIR BAG	15A	SRS Control Module, Passenger Occupant Detection Sensor
IG1	25A	PCB Block(Fuse - IEB 3, EPCU 2, E-SHIFTER 3)
MODULE 2	10A	Rear USB Charger, Smart Key Control Module, BCM, Audio,A/V & Navigation Head Unit, Power Outlet #1, AMP, IAU, Power Outside Mirror Switch
WASHER	15A	Muntifunction Switch
WIPER (LO/HI)	10A	BCM
WIPER RR	15A	Rear Wiper Relay, Rear Wiper Motor
WIPER FRT	25A	Front Wiper Motor, E/R Junction Block (Front Wiper(Low) Relay)
HEATED MIRROR	10A	Driver/Passenger Power Outside Mirror, A/C Control Module
POWER OUTLET	20A	Power Outlet #2
SPARE	15A	Spare
SPARE	15A	Spare

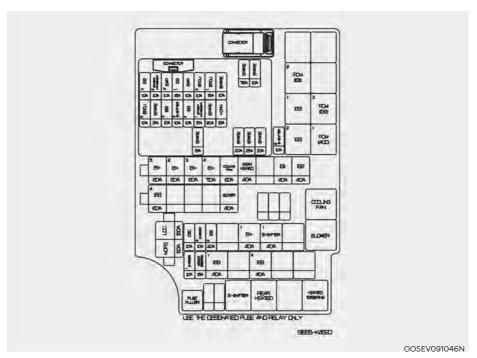
#### Motor compartment fuse panel



Inside the fuse/relay box covers, you can find the fuse/relay label describing fuse/relay names and ratings.

# *i* Information

Not all fuse panel descriptions in this manual may be applicable to your vehicle. It is accurate at the time of printing. When you inspect the fuse box on your vehicle, refer to the fuse box label.



#### Motor compartment fuse panel

Туре	Name	Fuse Rating	Circuit Protected
MULTI FUSE-3	LDC	150A	E/R Junction Block (Fuse - IEB 1, IEB 2, CHARGER 1, HEATED STEERING), EPCU (LDC)
	MDPS	80A	MDPS Unit
	B+ 5	60A	PCB Block ((Fuse - BATTERY MANAGEMENT 1, HORN, EPCU 1), IG3 MAIN Relay)
	B+ 2	60A	IGPM ((Fuse - S/HEATER FRT), IPS0, IPS1, IPS2)
	B+ 3	60A	IGPM (IPS3, IPS5, IPS6, IPS7)
MULTI FUSE-1	B+ 4	50A	IGPM (Fuse - P/WINDOW LH, P/ WINDOW RH, LIFTGATE OPEN, SUNROOF, AMP, P/SEAT (DRV), P/SEAT (PASS), S/HEATER REAR)
	COOLING FAN	60A	E/R Junction Block (Cooling Fan Relay)
	REAR HEATED	40A	E/R Junction Block (Rear Heated Relay)
	IG1	40A	E/R Junction Block (PDM (IG1) 2 Relay, PDM (ACC) 1 Relay)
	IG2	40A	E/R Junction Block (PDM (IG2) 3 Relay)
MULTI	IEB 4	40A	Electronic Brake Control Module
FUSE-2	BLOWER	40A	E/R Junction Block (Blower Relay)
	OBC	10A	OBC
	CHARGER 2	10A	ICM Relay Box (Charge Connector Lock/ Unlock Relay), CCM Unit
FUSE	IG3 2	20A	E/R Junction Block (IG3 1 Relay, IG3 2 Relay)
	B+ 1	40A	IGPM ((Fuse - BRAKE SWITCH, MODULE 1, PDM 1, PDM 2, DOOR LOCK), Leak Current Autocut Device)
	E-SHIFTER 1	40A	E/R Junction Block (Fuse - E-SHIFTER 2, E-Shifter Relay)
	CHARGER 1	10A	Charge Connector Door Module
	IEB 1	40A	Electronic Brake Control Module, Multipurpose Check Connector
	IEB 2	40A	Electronic Brake Control Module

# Motor compartment fuse panel (Battery terminal cover)



Inside the fuse/relay box cover, you can find the fuse/relay label describing fuse/relay names and ratings.

# *i* 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.



#### NOTICE

After checking the fuse panel in the motor compartment, securely install the cover. If it is not securely latched, electrical failure may occur from water contact.

#### **LIGHT BULBS**

Consult an authorized 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.

## **MARNING**

- Prior to working on a light, depress the foot brake, shift to P (Park), apply the parking brake, place the START/ STOP 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.

#### NOTICE

Be sure to replace the burned-out bulb with one of the same wattage rating. Otherwise, it may cause damage to the fuse or electrical wiring system.

#### NOTICE

To prevent damage, do not clean the headlight lens with chemical solvents or strong detergents.

## *i* 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 your vehicle inspected by an authorized HYUNDAI dealer.

## *i* 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 system checked by an authorized HYUNDAI dealer.
- The position lamp may not turn on when the position lamp switch is turned on, but the position 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 system checked by an authorized HYUNDAI dealer.

# *i* Information

After an accident or head lamp replacement, consult an authorized HYUNDAI dealer to perform the headlight aiming.

#### Headlight, Position Lamp, Turn Signal Lamp and Daytime Running Light Bulb Replacement Type A



- (1) Turn signal lamp
- (2) Headlight (High/Low)
- (3) Daytime running light (if equipped) / Position lamp (LED)
- (4) Side marker (LED)

## **⚠** WARNING

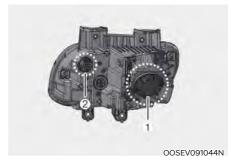


- Handle halogen bulbs with care.
  Halogen bulbs contain pressurized
  gas that will produce flying pieces
  of glass that could cause injuries if
  broken.
- Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.
- Always handle them carefully, and avoid scratches and abrasions. If the bulbs are lit, avoid contact with liquids.
- Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit.
- A bulb should be operated only when installed in a headlight.
- If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.



Headlight

- 1. Open the hood.
- 2. Disconnect the negative battery cable.
- 3. Remove the bulb cover (1) by turning it counterclockwise.
- 4. Disconnect the bulb socketconnector. (for low beam and high beam)
- 5. Remove the bulb from the headlight assembly.
- 6. Install a new bulb.
- 7. Connect the bulb socket-connector. (for low beam and high beam)
- 8. Install the bulb cover by turning it clockwise.



#### Turn signal lamp

- 1. Open the hood.
- 2. Disconnect the negative battery cable.
- 3. Remove the bulb cover (2) by turning it counterclockwise.
- 4. Disconnect the bulb socketconnector.
- 5. Remove the bulb from the assembly.
- 6. Install a new bulb.
- 7. Connect the bulb socket-connector.
- 8. Install the bulb cover by turning it clockwise.

Daytime running light, Side marker and position lamp

If the LED lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

#### Type B



- (1) Headlight (High) (LED)
- (2) Headlight (Low) (LED)
- (3) Daytime running light / Position lamp/ Turn signal lamp (LED) (if equipped)
- (4) Side marker (LED)





- Handle halogen bulbs with care.
   Halogen bulbs contain pressurized
   gas that will produce flying pieces
   of glass that could cause injuries if
   broken.
- Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.
- Always handle them carefully, and avoid scratches and abrasions. If the bulbs are lit, avoid contact with liquids.
- Never touch the glass with bare hands. Residual oil may cause the bulb to overheat and burst when lit.
- A bulb should be operated only when installed in a headlight.
- If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.

Daytime running light, position lamp, turn signal lamp, and head lamp

If the LED lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

#### Side Repeater Lamp Replacement



If the light bulb does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

# Rear Combination Lamp Bulb Replacement





- (1) Stop/Tail lamp
- (2) Tail lamp(Type A), Stop/Tail lamp (Type B)
- (3) Turn signal lamp (Bulb) (Type A) Turn signal lamp (LED) (Type B)
- (4) Backup lamp
- (5) Side marker



#### Stop/Tail lamp

- 1. Turn off the vehicle.
- 2. Open the liftgate.
- 3. Loosen the lamp assembly retaining screws with a cross-tip screwdriver.



- Remove the rear combination lamp assembly from the body of the vehicle.
- Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket.
   Pull the bulb out of the socket.
- Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
- Install the socket into the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
- 9. Reinstall the lamp assembly to the body of the vehicle.



Tail lamp (Type A)

- 1. Turn off the vehicle.
- 2. Open the liftgate.
- Remove the service cover using a flatblade screwdriver.
- Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- Remove the bulb from the socket by pressing it in and rotating it counterclockwise until the tabs on the bulb align with the slots in the socket.
   Pull the bulb out of the socket.
- Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
- Install the socket into the assembly by aligning the tabs on the socket with the slots in the assembly. Push the socket into the assembly and turn the socket clockwise.
- 8. Reinstall the lamp assembly to the body of the vehicle.

Tail / Stop lamp / Side marker (Type B)
If the LED lamp does not operate, have
the vehicle checked by an authorized
HYUNDAI dealer.

Turn signal lamp / Reverse lamp

If these lamps do not operate, have
the vehicle checked by an authorized
HYUNDAI dealer.

#### High Mounted Stop Lamp Replacement



If the high mounted stop lamp (LED) does not operate, contact an authorized HYUNDAI dealer.

# **License Plate Light Bulb Replacement**



- 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 (LED type)







If the LED lamp does not operate, have the vehicle checked by an authorized HYUNDAI dealer.

#### Map lamp, room lamp, vanity mirror lamp and luggage compartment lamp (Bulb type)









- Using a flat-head screwdriver, gently pry the lens from the interior light housing.
- 2. Remove the bulb by pulling it straight out.
- 3. Install a new bulb into the socket.
- 4. Align the lens tabs with the interior light housing notches and snap the lens into place.

#### NOTICE

Use care not to dirty or damage lenses, lens tabs, and plastic housings.

#### **APPEARANCE CARE**

#### **Exterior Care**

#### NOTICE

If you park your vehicle near a stainless steel sign or glass facade building, the vehicle's exterior plastic parts such as a bumper, spoiler, garnish, lamp or outside rearview mirror might be damaged due to sunlight reflected from the sign or building. To prevent damage of the exterior plastic parts, you should avoid parking in areas where light may be reflected or use a car cover. (The exterior plastic parts applied to your vehicle may vary.)

#### Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

#### Finish maintenance

#### Washing

To help protect your vehicle's finish from rust and deterioration, 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, may be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

#### **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.



#### 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 and lamps, do not clean with chemical solvents or strong detergents.



#### WARNING

#### Wet brakes

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.

#### 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.



#### **NOTICE**

- Water washing in the motor compartment including high pressure water washing may cause the failure of electrical circuits located in the motor 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 (if equipped)
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 is a barrier between your paint and contaminate. 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 (if equipped)

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.

#### Finish damage repair

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 anticorrosion materials to the parts repaired or replaced.

#### NOTICE

Matte paint finish vehicle (if equipped)
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 brightmetal 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 frame and floor pan, even though they have been treated with rust protection.

Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It 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.

- 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 highspeed car wash brushes.
- Do not use any cleaners containing acid or alkaline detergents.

#### NOTICE

- Do not use any 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, be sure to clean the wheels after driving on salted roads.
- Do not wash the wheels with highspeed car wash brushes.
- Do not use any cleanser containing acid or alkaline detergents.

#### Corrosion protection

Protecting your vehicle from corrosion
By using the most advanced design
and construction practices to combat
corrosion, we produces vehicles of the
highest quality. However, this is only
part of the job. To achieve the long-term
corrosion resistance your vehicle can
deliver, the owner's cooperation and
assistance 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 vehicle surfaces by moisture that is slow to evaporate.

Mud is particularly corrosive because it is slow to dry and holds moisture in contact with the vehicle. Although the mud appears to be dry, it can still retain moisture and promote corrosion.

High temperatures 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 vehicle clean

The best way to prevent corrosion is to keep your vehicle clean and free of corrosive materials. Attention to the underside of the vehicle is particularly important.

- If you live in a high-corrosion area —
  where road salts are used, near the
  ocean, areas with industrial pollution,
  acid rain, 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, give 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 vehicle in a damp, poorly ventilated garage. This creates a favorable environment for corrosion. This is particularly true if you wash your vehicle in the garage or drive it into the garage when it is still wet or covered with snow, ice or mud. Even a heated garage 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.

#### Don't neglect the interior

Moisture can collect under the floor mats and vehicle peting to cause corrosion. Check under the mats periodically to be sure the carpeting is dry. Use particular care if you carry fertilizers, cleaning materials or chemicals in the vehicle.

These should be carried only in proper containers and any spills or leaks should be cleaned up, flushed with clean water and thoroughly dried.

#### **Interior Care**

#### Interior general precautions

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. If they do contact the interior parts, wipe them off immediately.

See the instructions that follow 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 nondetergent 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)

- Features 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 product, each part differs in thickness or density.

Wrinkles may appear as a natural result of stretching and shrinking depending on the temperature and humidity.

- 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 product.

## **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 protector may prevent abrasion of the cover and helps maintain the color. Be sure to read the instructions and consult a specialist when using leather coating or protective agent.
  - Light colored (beige, cream beige) leather 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 contaminated 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.
  - ∩il

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 lap/shoulder 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 it.

#### 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: http://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).

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#### WARRANTIES FOR YOUR HYUNDAIVEHICLE

Please consult your Owner's Handbook & Warranty Information booklet for your vehicle's specific warranty coverage.

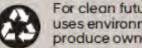
#### RESPONSIBILITY FOR MAINTENANCE

The maintenance requirements for your new HYUNDAI are found in Section 9. As the owner, it is your responsibility to see that all maintenance operations specified by the manufacturer are carried out at the appropriate intervals. When the vehicle is used in severe driving conditions, more frequent maintenance is required for some operations. Maintenance requirements for severe operating conditions are also included in Section 9.

## 

"Operating, servicing and maintaining a passenger vehicle or off- road vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings. ca.gov/passenger-vehicle."

PGKO-EU26A (영어 | 미국)



# KONA Electric

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2023 Owner's Manual