## HYUNDAI

## OWNER'S MANUAL

Operation Maintenance Specifications

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

This manual applies to all 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.

Please note that some models are equipped with Right-Hand Drive (RHD). The explanations and illustrations for some operations in RHD models are opposite of those written in this manual.

### **CAUTION: MODIFICATIONS TO YOUR HYUNDAI**

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

#### TWO-WAY RADIO OR CELLULAR TELEPHONE INSTALLATION

Your vehicle is equipped with electronic fuel injection and other electronic components. It is possible for an improperly installed/adjusted two-way radio or cellular telephone to adversely affect electronic systems. For this reason, we recommend that you carefully follow the radio manufacturer's instructions or consult your HYUNDAI dealer for precautionary measures or special 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:

### **A** DANGER

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

### **A** WARNING

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

## **A** 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.

#### **FOREWORD**

Congratulations, and thank you for choosing HYUNDAI.We are pleased to welcome you to the growing number of distinguished 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 COMPANY**

### **A CAUTION**

Severe engine and transmission damage may result from the use of poor quality fuels and lubricants that do not meet HYUNDAI specifications. You must always use high quality fuels and lubricants that meet the specifications listed on Page 8-6 in the Vehicle Specifications section of the Owner's Manual.

Copyright 2017 HYUNDAI Motor Company. All rights reserved. No part of this publication may be reproduced, stored in any retrieval system or transmitted in any form or by any means without the prior written permission of HYUNDAI Motor Company.

### **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 eight chapters plus an index. Each chapter 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.

## **A** 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.

## **A** CAUTION

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

### NOTICE

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

### **FUEL REQUIREMENTS**

#### Unleaded

For Europe

For the optimal vehicle performance, we recommend you use unleaded gasoline which has an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher. You may use unleaded gasoline with an octane rating of RON 91-94 / AKI 87-90 but it may result in slight performance reduction of the vehicle. (Do not use methanol blended fuels)

### **Except Europe**

Your new vehicle is designed to use only unleaded fuel having an Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher. (Do not use methanol blended fuels)

Your new vehicle is designed to obtain maximum performance with UNLEADED FUEL, as well as minimize exhaust emissions and spark plug fouling.

#### NOTICE

NEVER USE LEADED FUEL. The use of leaded fuel is detrimental to the catalytic converter and will damage the engine control system's oxygen sensor and affect emission control.

Never add any fuel system cleaning agents to the fuel tank other than what has been specified (We recommend that you consult an authorized HYUNDAI dealer for details.)

### **A** WARNING

- Do not "top off" after the nozzle automatically shuts off when refueling.
- Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

### Leaded (if equipped)

For some countries, your vehicle is designed to use leaded gasoline. When you are going to use leaded gasoline, we recommend that you ask an authorized HYUNDAI dealer. Octane rating of leaded gasoline is same with unleaded one.

## Gasoline containing alcohol and methanol

Gasohol, a mixture of gasoline and ethanol (also known as grain alcohol), and gasoline or gasohol containing methanol (also known as wood alcohol) are being marketed along with or instead of leaded or unleaded gasoline.

Do not use gasohol containing more than 10% ethanol, and do not use gasoline or gasohol containing any methanol. Either of these fuels may cause drivability problems and damage to the fuel system, engine control system and emission control system. Discontinue using gasohol of any kind if drivability problems occur.

Vehicle damage or driveability problems may not be covered by the manufacturer's warranty if they result from the use of:

- 1. Gasohol containing more than 10% ethanol.
- Gasoline or gasohol containing methanol.
- 3. Leaded fuel or leaded gasohol.

### NOTICE

Never use gasohol which contains methanol. Discontinue use of any gasohol product which impairs drivability.

#### Other fuels

Using fuel additives such as:

- Silicone fuel additive
- MMT (Magnanese, Mn) fuel additive
- Ferrocene (iron-based) fuel additive
- Other metallic-based fuel additives

may result in cylinder misfire, poor acceleration, engine stalling, damage to the catalyst, or abnormal corrosion, and may cause damage to the engine resulting in a reduction in the overall life of the powertrain.

### NOTICE

Damage to the fuel system or performance problem caused by the use of these fuels may not be covered by your New Vehicle Limited Warranty.

### Use of MTBE

HYUNDAI recommends avoiding fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight) in your vehicle.

Fuel containing MTBE over 15.0% vol. (Oxygen Content 2.7% weight) may reduce vehicle performance and produce vapor lock or hard starting.

### NOTICE

Your New Vehicle Limited Warranty may not cover damage to the fuel system and any performance problems that are caused by the use of fuels containing methanol or fuels containing MTBE (Methyl Tertiary Butyl Ether) over 15.0% vol. (Oxygen Content 2.7% weight.)

#### Do not use methanol

Fuels containing methanol (wood alcohol) should not be used in your vehicle. This type of fuel can reduce vehicle performance and damage components of the fuel system, engine control system and emission control system.

#### Fuel Additives

HYUNDAI recommends that you use unleaded gasoline which has an octane rating of RON (Research Octane Number) 95 / AKI (Anti Knock Index) 91 or higher (for Europe) or Octane Rating of RON (Research Octane Number) 91 / AKI (Anti-Knock Index) 87 or higher (except Europe). For customers who do not use good quality gasolines, and have problems starting or the engine does not run smoothly, one bottle of additive added to the fuel tank is recommended according to the maintenance schedule (refer to chapter 7, "Normal Maintenance Schedule").

Additives are available from your authorized HYUNDAI dealer along with information on how to use them. Do not mix other additives.

### Operation in foreign countries

If you are going to drive your vehicle in another country, be sure to:

- Observe all regulations regarding registration and insurance.
- Determine that acceptable fuel is available.

### **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.

# VEHICLE BREAK-IN PROCESS

By following a few simple precautions for the first 1,000 km (600 miles) you may add to the performance, economy and life of your vehicle.

- Do not race the engine.
- While driving, keep your engine speed (rpm, or revolutions per minute) between 2,000 rpm and 4,000 rpm.
- Do not maintain a single speed for long periods of time, either fast or slow. Varying engine speed is needed to properly break-in the engine.
- Avoid hard stops, except in emergencies, to allow the brakes to seat properly.

# RETURNING USED VEHICLES (FOR EUROPE)

HYUNDAI promotes an environmentally sound treatment for end of life vehicles and offers to take back your HYUNDAI end of life vehicles in accordance with the European Union (EU) End of Life Vehicles Directive.

You can get detailed information from your national HYUNDAI homepage.

|                   | Your vehicle at a glance              | 1 |  |  |
|-------------------|---------------------------------------|---|--|--|
|                   | Safety system of your vehicle         | 2 |  |  |
|                   | Convenient features of your vehicle   | 3 |  |  |
|                   | Multimedia System                     | 4 |  |  |
| TABLE OF CONTENTS | Driving your vehicle                  |   |  |  |
|                   | What to do in an emergency            | 6 |  |  |
|                   | Maintenance                           | 7 |  |  |
|                   | Specifications & Consumer information | 8 |  |  |
|                   | Index                                 | 1 |  |  |
|                   |                                       |   |  |  |

# Hybrid system overview

| HEV (Hybrid Electric Vehicle) System | H2  |
|--------------------------------------|-----|
| Hybrid Vehicle                       | H2  |
| Plug-in Hybrid Vehicle               | H3  |
| Charging the Plug-in Hybrid Vehicle  | H4  |
| Charging Information                 | H4  |
| Charging Time                        | H4  |
| Charging Types                       | H4  |
| Charging Status                      |     |
| Scheduled Charging                   | H6  |
| Charging Connector AUTO/ LOCK Mode.  |     |
| Charging Precautions                 | H8  |
| Normal Charge                        | H10 |
| Trickle Charge                       |     |
|                                      |     |

| riving the Hybrid/Plug-in Hybrid Vehicle     | H26 |
|--|-----|
| Starting the Vehicle                         | H26 |
| Special Features                             | H27 |
| Hybrid System Gauge                          | H29 |
| Plug-in Hybrid Mode (Plug-in hybrid vehicle) | H30 |
| Aux. Battery Saver+ (Plug-in hybrid vehicle) | H31 |
| Warning and Indicator Lights                 | H33 |
| LCD Display Messages                         | H35 |
| Energy Flow                                  | H43 |
| afety Precautions for Hybrid System          | H47 |
| Hybrid Vehicle Components Safety Precautions | H47 |
| Service Plug                                 | H50 |
| Hybrid Battery Cooling Duct                  | H51 |
| If an Accident Occurs                        | H52 |
| When the Hybrid Vehicle Shuts Off            | H53 |

### HEV (HYBRID ELECTRIC VEHICLE) SYSTEM

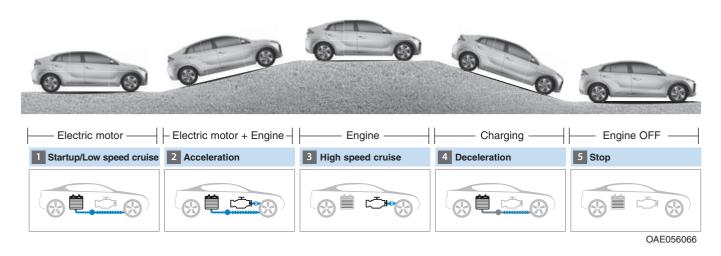
### **Hybrid Vehicle**

The HYUNDAI Hybrid Electric Vehicle (HEV) uses both the gasoline engine and the electric motor for power. The electric motor is run by a 270V high-voltage HEV battery.

Depending on the driving conditions, the HEV computer selectively operates between the engine and the electric motor or even both at the same time.

Fuel efficiency increases when the engine is at idle, or when the vehicle is driven by the electric motor with the HEV battery.

The HEV battery charge must be maintained, so at times the engine will come on even at idle to act as a generator. Charging also occurs when decelerating or by regenerative braking.



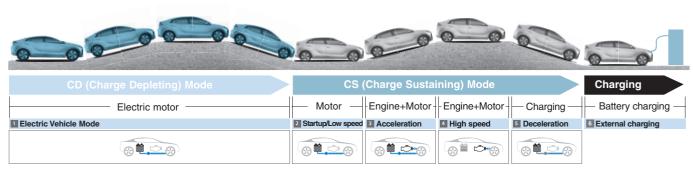
### **Plug-in Hybrid Vehicle**

The HYUNDAI Plug-in Hybrid Electric Vehicle (PHEV) shares the characteristics of both a conventional hybrid electric vehicle and an all-electric vehicle.

When used as a conventional hybrid electric vehicle, the HEV computer selectively operates between the engine and the electric motor or even both at the same time.

When it is operating in the electric vehicle mode, the vehicle is driven only using the electric motor over a certain distance until the hybrid battery becomes low. The driving distance in EV mode depends on customer driving style and road conditions. Aggressive driving maneuvers may at times temporarily enable the engine to operate for maximum power.

The hybrid battery can be fully charged by connecting a plug to an external electric power source.



OAEPH057200L

### CHARGING THE PLUG-IN HYBRID VEHICLE

## **Charging Information**

### • Normal Charge:

The plug-in hybrid vehicle is charged by plugging into a normal charger installed in your home or a public charging station. (For further details, refer to the 'Normal Charge'.)

### • Trickle Charge :

The plug-in hybrid 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**

### • Normal Charge :

Takes approximately 2 hours 15 minutes at room temperature. (Can be 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**

| Category          | Charging Inlet (Vehicle) | Charging Connector | Charging Outlet | How to Charge  | Charging Time  |
|-------------------|--------------------------|--------------------|-----------------|--|--|
| Normal<br>Charge  | OAEEQ016020              | OLFP0Q5006K        | OLFP0Q5007K     | Use normal charger installed in homes or public charging station | Approx. 2 hours<br>15 minutes (to fully<br>charge, 100%)     |
| Trickle<br>Charge | OAEE0015020              | OLFP0Q5006K        | OAFEQ016024     | Use household current  | Do not use for nor-<br>mal charging<br>(for emergency only). |

- 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.

## **Charging Status**



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

| Operation of Charging Indicator Lamp |         |         | Details   |             |  |  |
|--------------------------------------|---------|---------|---|-------------|--|--|
| (1)                                  | (2)     | (3)     | Details   |             |  |  |
| O (OFF)                              | O (OFF) | O (OFF) | N   | lot Charged |  |  |
| Blink                                | O (OFF) | O (OFF) |   | 0~33%       |  |  |
| • (ON)                               | Blink   | O (OFF) | Charging  | 34~66%      |  |  |
| • (ON)                               | • (ON)  | Blink   |   | 67~99%      |  |  |
| • (ON)                               | • (ON)  | • (ON)  | Fully charged (100%)(turns OFF in 5 seconds)                |             |  |  |
| Blink                                | Blink   | Blink   | Error while charging  |             |  |  |
| O (OFF)                              | O (OFF) | Blink   | Charging the 12 V auxiliary battery (Aux. Battery Saver+)   |             |  |  |
| O (OFF)                              | Blink   | O (OFF) | Scheduled charging is operating (turns OFF after 3 minutes) |             |  |  |

## Scheduled Charging (if equipped)

- You can set-up a charging schedule for your vehicle using the AVN or BlueLink application.
  - Refer to the Multimedia manual or the BlueLink manual for detailed information about setting scheduled charging.
- Scheduled charging can only be done when using a normal charger or the portable charger (ICCB: In-Cable Control Box).



- When scheduled charging is set and the normal charger or the portable charger (ICCB: In-Cable Control Box) is connected for charging, the indicator lamp in the middle blinks (for 3 minutes) to indicate that scheduled charging is set.
- When scheduled charging is set, charging is not initiated immediately when the normal charger or portable charger (ICCB: In-Cable Control Box) is connected. When immediate charging is required, use the AVN to deactivate the scheduled charge setting or press scheduled charging deactivation ( ) button.



If you press the scheduled charging deactivation ((\*\*)) button to immediately charge the battery, charging must be initiated 3 minutes after the charging cable has been connected.

When you press the scheduled charging deactivation ((\text{\text{\$\text{CM}\$}})) button for immediate charging, the scheduled charge setting is not completely deactivated. If you need to completely deactivate the scheduled charge setting, use the AVN to finalize the deactivation.

Refer to "Normal Charge or Trickle Charge" for details about connecting the normal charger and the portable charger (ICCB: In-Cable Control Box).

### Charging Connector AUTO/ LOCK Mode



You may select when the charging connector can be locked and unlocked in the charging inlet.

Press the state button to change between AUTO mode and LOCK mode.

## When the Charging Connector Is Locked

|                   | LOCK | AUTO |
|-------------------|------|------|
| Before charging   | 0    | Х    |
| While charging    | 0    | 0    |
| Finished charging | 0    | Х    |

- LOCK mode (button indicator off):
   The connector locks when the charging connector is plugged into the charging inlet. The connector is locked until all doors are unlocked by the driver. This mode can be used to prevent charging cable theft.
  - If the charging connector is unlocked when all doors are unlocked, but the charging cable is not disconnected within 10 seconds, the connector will be automatically locked again.
  - If the charging connector is unlocked when all doors are unlocked, but all doors are locked again, immediately, the connector will be automatically locked again.

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.

## **Charging Precautions**



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

### **A** WARNING

 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.

 Check to make sure there is no water or dust on the charging cable connector and plug before connecting to the charger and charging inlet. Connecting while there is water or dust on the charging cable connector and plug may cause a fire or electric shock.

### **A** WARNING

- Be careful not to touch the charging connector, charging plug, and the charging inlet when connecting the cable to the charger and the charging inlet on the vehicle.
- Comply with the following in order to prevent electrical shock when charging:
  - Use a waterproof charger.
  - Be careful when touching the charging connector and charging plug with your hands wet, or when standing in water or snow while connecting the charging cable.
  - Be careful when there is lightning.
  - Be careful when the charging connector and plug is wet.

## **A** 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 disconnect or get damaged. This may lead to electric shock or fire.

## **A** CAUTION

- Always keep 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.
- Make sure to use the designated charger for charging the electric vehicle. Using any other charger may cause failure.
- 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.

## **Normal Charge**



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

## How to Connect Normal Charger

- 1.Depress the brake pedal and apply the parking brake.
- 2.Turn OFF all switches, shift to P (Park), and turn OFF the vehicle.



3. Press center edge of the charging door to open the charging door.

## Information

The charging door opens only when the door is unlocked.

 Check if there is dust on the charging connector and charging inlet.



5. Hold the charging connector handle and connect it to the vehicle normal charging inlet. Push the connector until you hear a "clicking" sound. If the charging connector and charging terminal are not connected properly, 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.



6. Connect the charging plug to the electric outlet at a normal charging station to start charging.



7. Check if the charging indicator light of the high voltage battery on the instrument cluster is turned ON. Charging is not done when the charging indicator lamp is OFF.

When the charging connector and charging plug are not connected properly, reconnect the charging cable to charge.

## Information

- Even though charging is possible with the ignition switch in the ON/START position, for your safety, start charging when the ignition switch is in the LOCK/OFF position and the vehicle shifted to P (Park). After charging has started, you can use electrical components such as the radio by placing the ignition switch in the ACC or ON position.
- During normal charging, the radio reception may be bad.
- Moving the shift lever from P (Park) to R (Reverse)/N(Neutral)/D (Drive) stops the charging process.

To restart the charging process, move the shift lever to P (Park), place the ignition switch to the LOCK/OFF position, and disconnect the charging cable. Then, connect the charging cable.



OAEPH047193L

 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 is set, the estimated charging time is displayed as "--".

## 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.

| Operation of | Operation of Charging Indicator Lamp |         | Details   |             |  |  |
|--------------|--------------------------------------|---------|---|-------------|--|--|
| (1)          | (2)                                  | (3)     | Details   |             |  |  |
| O (OFF)      | O (OFF)                              | O (OFF) | N   | lot Charged |  |  |
| Blink        | O (OFF)                              | O (OFF) |   | 0~33%       |  |  |
| • (ON)       | Blink                                | O (OFF) | Charging  | 34~66%      |  |  |
| • (ON)       | • (ON)                               | Blink   |   | 67~99%      |  |  |
| • (ON)       | • (ON)                               | • (ON)  | Fully charged (100%)(turns OFF in 5 seconds)                |             |  |  |
| Blink        | Blink                                | Blink   | Error while charging  |             |  |  |
| O (OFF)      | O (OFF)                              | Blink   | Charging the 12 V auxiliary battery (Aux. Battery Saver+)   |             |  |  |
| O (OFF)      | Blink                                | O (OFF) | Scheduled charging is operating (turns OFF after 3 minutes) |             |  |  |

## How to Disconnect Normal Charger



1. When charging is complete, remove the charging plug from the electrical outlet of the normal charging station.



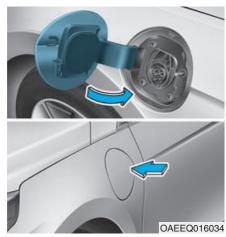
2. Hold the charging connector handle and pull it while pressing the release button (1).

## **i** Information

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

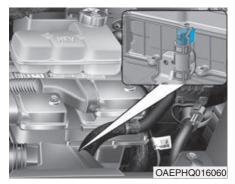
However, if the vehicle is in the charging connector AUTO mode, the charging connector automatically unlocks from the inlet when charging is completed.

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



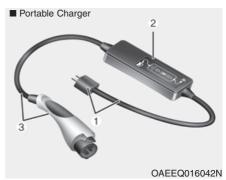
3. Make sure to completely close the charging door.

## Unlock Charging Connector in Emergency



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

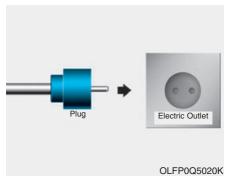
## **Trickle Charge**



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

Trickle Charge can be used when Normal Charge is not available by using household electricity.

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



1.Connect the plug to a household electric outlet.



2.Check if the power lamp (green) illuminates on the control box.

- 3. Depress the brake pedal and apply the parking brake.
- 4.Turn OFF all switches, shift to P (Park), and turn OFF the vehicle.



5. Press center edge of the charging door to open the charging door.

## *i* Information

The charging door opens only when the door is unlocked.

6. Check if there is dust on the charging connector and charging inlet.



7. Hold the charging connector handle and connect it to the vehicle normal charging inlet. Push the connector until you hear a "clicking" sound. If the charging connector and charging terminal are not connected properly, this may cause a fire.

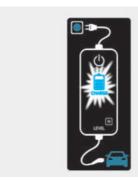
## Information

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.



8. Charging starts automatically (charging lamp blinks).

OAFFQ016045



 Check if the charging indicator light of the high voltage battery on the instrument cluster is turned ON. Charging is not done when the charging indicator lamp is OFF.

When the charging connector is not connected properly, reconnect the charging cable to charge it again.

## Information

• Even though charging is possible with the ignition switch in the ON/START position, for your safety, start charging when the ignition switch is in the LOCK/OFF position and the vehicle shifted to P (Park).

After charging has started, you can use electrical components such as the radio by placing the ignition switch in ACC or ON position.

• Moving the shift lever from P (Park) to R (Reverse)/N(Neutral)/D (Drive) stops the charging process.

To restart the charging process, move the shift lever to P (Park), place the ignition switch to the LOCK/OFF position, and disconnect the charging cable. Then, connect the charging cable.



OAEPH047193L

 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 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.

| Operation o | Operation of Charging Indicator Lamp |         |   | - Details   |  |  |
|-------------|--------------------------------------|---------|---|-------------|--|--|
| (1)         | (2)                                  | (3)     | Details   |             |  |  |
| O (OFF)     | O (OFF)                              | O (OFF) | N   | lot Charged |  |  |
| Blink       | O (OFF)                              | O (OFF) |   | 0~33%       |  |  |
| • (ON)      | Blink                                | O (OFF) | Charging  | 34~66%      |  |  |
| • (ON)      | • (ON)                               | Blink   |   | 67~99%      |  |  |
| • (ON)      | • (ON)                               | • (ON)  | Fully charged (100%)(turns OFF in 5 seconds)                |             |  |  |
| Blink       | Blink                                | Blink   | Error while charging  |             |  |  |
| O (OFF)     | O (OFF)                              | Blink   | Charging the 12 V auxiliary battery (Aux. Battery Saver+)   |             |  |  |
| O (OFF)     | Blink                                | O (OFF) | Scheduled charging is operating (turns OFF after 3 minutes) |             |  |  |

## Charging Status Indicator Lamp for Portable Charger

| Control Box         | Indicato     | or      | Details  |
|---------------------|--------------|---------|--|
|                     | PLUG         | (Green) | On : Power on Blink : Plug temperature sensor failure                            |
|                     |              | (Red)   | On : Plug high temperature protection<br>Blink : Plug high temperature warning   |
|                     | POWER        | POWER   | On: Power on   |
| POWER               | CHARGE       | CHARGE  | Blink : Charging In power saving mode, only the CHARGE indicator is illuminated. |
|                     | FAULT        |         | Blink : Charging interrupted   |
| CHARGE              | CHARGE LEVEL | H       | Charging current 12 A  |
| Z <u>!</u><br>FAULT |              | M       | Charging current 9 A   |
| L M H               |              | L       | Charging current 6 A   |
|                     |              | (Green) | Charging connector plugged   |
|                     |              | (Blue)  | Charging   |
|                     |              | (Red)   | Blink : Charging impossible  |

## Charging Status Indicator Lamp for Portable Charger

| NO | Control Box  | Status / Diagnosis / Countermeasure  | NO | Control Box    | Status / Diagnosis / Countermeasure   |
|----|--------------|--|----|----------------|---|
| 1  | TEVEL        | <ul> <li>Charging connector plugged into vehicle (Green ON)</li> <li>Plug temperature sensor failure (Green blink)</li> <li>Plug high temperature protection (Red blink)</li> <li>Plug high temperature warning (Red ON)</li> <li>We recommend that you contact an authorized HYUNDAI dealer.</li> </ul> | 2  | POWER IN LEVEL | - Charging connector plugged into vehicle (Green ON)  |
| 3  | CHARGE LEVEL | <ul> <li>While charging</li> <li>Charge indicator (Green blink)</li> <li>Vehicle indicator (Blue ON)</li> </ul>  | 4  | POWER IN LEVEL | - Before plugging charging connector into vehicle (Red blink)  • Abnormal temperature  • ICCB (In-Cable Control Box) failure  We recommend that you contact an authorized HYUNDAI dealer. |

## Charging Status Indicator Lamp for Portable Charger

| NO | Control Box | Status / Diagnosis / Countermeasure  | NO | Control Box      | Status / Diagnosis / Countermeasure  |
|----|-------------|--|----|------------------|--|
| 5  | Dower Level | <ul> <li>Plugged into vehicle (Red blink)</li> <li>Diagnostic device failure</li> <li>Current leakage</li> <li>Abnormal temperature</li> </ul> We recommend that you contact an authorized HYUNDAI dealer.   | 6  | D POWER IN LEVEL | - After plugging charging connector into vehicle (Red blink)  • Communication failure  We recommend that you contact an authorized HYUNDAI dealer. |
| 7  | POWER       | <ul> <li>Plug temperature sensor failure<br/>(Green blink)</li> <li>Plug high temperature protection<br/>(Red blink)</li> <li>Plug high temperature warning (Red ON)</li> <li>We recommend that you contact an authorized HYUNDAI dealer.</li> </ul> | 8  | ***              | - Power saving mode  • 3 minutes after charging starts (Green blink)   |

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

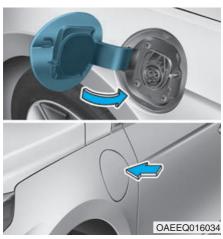


1. Hold the charging connector handle and pull it while pressing the release button (1).

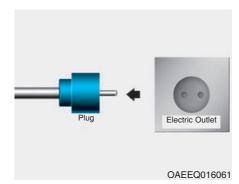
## Information

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

However, if the vehicle is in the charging connector AUTO mode, the charging connector automatically unlocks from the inlet when charging is completed. For more details, refer to "Charging Connector AUTO/ LOCK Mode" in this chapter.



2. Make sure to completely close the charging door.



- Disconnect the plug from the household electric outlet. Do not pull the cable when disconnecting the plug.
- 4.Close the protective cover for the charging connector so that foreign material cannot get into the terminal.
- 5. Put the charging cable inside the cable compartment to protect it.

### Unlock Charging Connector in Emergency



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

### Precautions for Portable Charger (ICCB: In-Cable Control Box)

- Use the portable charger that is certified by HYUNDAI Motors.
- Do not try to repair, disassemble, or adjust the portable charger.
- Do not use an extension cord or adapter.
- 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 normal charging connector and the normal charging inlet 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 out, exposed, or there exists any type of damage on the portable charger.
- If the ICCB case and normal charging connector is damaged, cracked, or the wires are exposed in any way, do not use the portable charger.

- Do not let children operate or touch the portable charger.
- Keep the control box free of 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 charge when there is lightning.
- Do not drop the control box or place a heavy object on the control box.
- Do not place an object that can generate high temperatures near the charger when charging.
- Charging with the worn out or damaged household electric outlet can result in a risk of electric shock. If you are in doubt to the household electric outlet condition, have it checked by a licensed electrician.
- Stop using the portable charger immediately if the household electric outlet or any components is overheated or you notice burnt odors.

### DRIVING THE HYBRID/PLUG-IN HYBRID VEHICLE

## **Starting the Vehicle**

### Vehicles with remote key system

- 1.Make sure the parking brake is applied.
- 2.Make sure the shift lever is in P (Park).
- 3.Depress the brake pedal.
- 4.Turn the ignition swich to the START position. Hold the key (maximum of 10 senconds) until the " = " comes on and release it. Whether the engine is cold or warm, it should be started without depressing the accelerator.

After following the start procedures, " == " indicator on the instrument cluster will turn on. For more information, please check Chapter 5.

### Vehicles with smart key system

- 1.Carry the smart key or leave it inside the vehicle.
- 2.Make sure the parking brake is firmly applied.
- 3.Place the shift lever in P (Park). With the shift lever in N (Neutral), you cannot start the vehicle.
- 4. Depress the brake pedal.
- 5.Press the Engine Start/Stop button. If the hybrid system starts, the " = " indicator will come on.

Whether the engine is cold or warm, it should be started without depressing the accelerator.

After following the start procedures, " " indicator on the instrument cluster will turn on. For more information, please check Chapter 5.

## ECONOMICAL and SAFE OPERA-TION of Hybrid system

- Drive smoothly. Accelerate at a moderate rate and maintain a steady cruising speed. Do not make "jack-rabbit" starts. Do not race between stoplights.
  - Avoid heavy traffic whenever possible. Always maintain a safe distance from other vehicles so you can avoid unnecessary braking. This also reduces brake wear out.
- The regenerative brake generates energy when the vehicle decelerates.
- When the hybrid battery power is low, the hybrid system automatically recharges the hybrid battery.
- When the engine run with the shift lever in N (Neutral), the hybrid system cannot generate electricity. The hybrid battery cannot recharge with the shift lever in N (Neutral).

### Information

In the hybrid system, the engine automatically runs and stops. When the hybrid system operates, the "="" indicator is illuminated.

In the following situation, the engine may operate automatically.

- When the engine is ready to run
- When the hybrid battery is being charged
- Depending on the temperature condition of the hybrid battery

### **Special Features**

Hybrid vehicles sound different than gasoline engine vehicles. When the hybrid system operates, you may hear a sound from the hybrid battery system behind the rear seat. If you apply the accelerator pedal rapidly, you may hear an unconventional sound. When you apply the brake pedal, you may hear a sound from the regenerative brake system. When the hybrid system is turned off or on, you may hear a sound in the engine compartment. If you depress the brake pedal repeatedly when the hybrid system is turned on, you may hear a sound in the engine compartment. None of these sounds indicate a problem. These are normal characteristics of hybrid vehicles.

If any of following occur, it's a normal condition if you hear a motor sound in the engine compartment:

- After turning off the hybrid system, the brake pedal is released.
- When the hybrid system is turned off, the brake pedal is applied.
- When the driver door is opened.

When the hybrid system is turned ON, the engine may run or may not. In this situation, you may feel a vibration. This does not indicate a malfunction. When the "=" indicator illuminates, the hybrid system is ready to start. Even if the engine is off, you can operate the vehicle as long as the "=" indicator is illuminated."

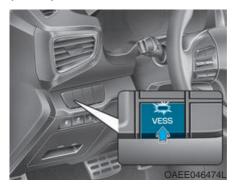
#### NOTICE

The hybrid system contains many electronic components. High voltage components, such as cables and other parts, may emit electromagnetic waves. Even when the electromagnetic cover blocks electromagnetic emissions, electromagnetic waves may have an effect on electronic devices. When your vehicle is not for a long period of time, the hybrid system will discharge. You need to drive the vehicle several times a month. We recommend driving at least for 1 hour or 16 km. When the hybrid battery is discharged, or when it is impossible to jump start the vehicle, contact your HYUNDAI dealer.

### **A WARNING**

- When you start the hybrid system with the shift lever in P (Parking), the "=" "indicator illuminates on the instrument cluster. The driver can drive the vehicle, even when the engine is stopped.
- When you leave the vehicle, you should turn OFF the hybrid system or locate the shift lever in P (Park). When you depress the accelerator pedal by mistake, or when the shift lever is not in P (Park), the vehicle will abruptly move, possibly resulting in serious injury or death.

### Virtual Engine Sound System (VESS)



The Virtual Engine Sound System generates engine sound for pedestrians to hear vehicle sound because there is limited sound while motor power is used.

- The VESS may be turned ON or OFF by pressing the VESS button. (if equipped)
- If the vehicle is moving at low speed, the VESS will operate.
- When the gear is shifted to R (Reverse), an additional warning sound will be heard.

### What Does Regenerative Braking Do?

It uses an electric motor when decelerating and when braking and transforms kinetic energy to electrical energy in order to charge the high voltage battery.

### **Battery**

- Hybrid
  - The vehicle is composed of a high voltage battery that drives the motor and air conditioner, and an integrated 12V lithium ion polymer battery with the HEV battery that drives the lamps, wipers, and audio system.
  - The integrated 12V battery is automatically charged when the vehicle is in the ready ( ) mode.
- Plug-in hybrid vehicle
  - The vehicle is composed of a highvoltage 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.

### **Hybrid System Gauge**



The hybrid system gauge indicates whether the current driving condition is fuel efficient or not.

- CHARGE:
  - Shows that the energy made by the vehicle is being converted to electrical energy. (Regenerated energy)
- ECO :

Shows that the vehicle is being driven in an Eco-friendly manner.

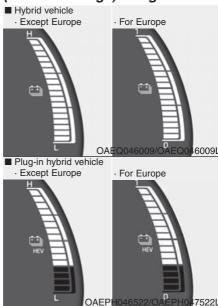
• POWER:

Shows that the vehicle is exceeding the Eco-friendly range.

According to the hybrid system gauge area, the "EV" indicator comes on or off.

- "EV" indicator ON: Vehicle is driven using the electric motor or the gasoline engine is stopped.
- "EV" indicator OFF: Vehicle is driven using the gasoline engine.

### Hybrid Battery SOC (State of Charge) Gauge



This gauge indicates the remaining hybrid battery power. If the SOC is near the "0 or L (Low)" level, the vehicle automatically operates the engine to charge the battery.

However, if the Service Indicator ( ) and Malfunction Indicator Lamp (MIL) ( ) turn on when the SOC gauge is near the "0 or L (Low)" level, we recommend the vehicle be checked by an authorized HYUNDAI dealer.

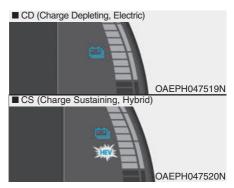
### Plug-in Hybrid Mode (Plug-in hybrid vehicle)

### **EV/HEV** Button



Pressing the [EV/HEV] button changes the plug-in hybrid system modes, between Electric (CD) mode and Hybrid (CS) mode.

Each time the mode is changed a corresponding indicator is displayed on the instrument cluster as follows.



### Plug-in hybrid mode indicator

- CD (Charge Depleting, Electric) mode: The high-voltage (hybrid) battery is used to drive the vehicle.
- CS (Charge Sustaining, Hybrid) mode: The high-voltage (hybrid) battery and gasoline engine is used to drive the vehicle.

### Information

Even when the battery charging rate is high and driving in electric mode is possible, engine may turn on in some areas to protect the system.

### AVN Screen (Plug-in hybrid vehicle) (if equipped)



Press [PHEV] on the [Home] screen or the [All menus] screen and the menus related to plug-in hybrid ([ECO driving], [Energy information], [EV range], [Set charging times], [Charging stations], [Petrol stations]) are displayed.

For more information, please refer to the Multimedia System Manual that was separately supplied with your vehicle.

### Aux. Battery Saver+ (Plug-in hybrid vehicle)

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, you may turn it off in the Users Settings mode on the cluster. For more information, refer to the following page.

#### Mode

• Cycle Mode :

When the vehicle is OFF with all doors, hood and tailgate closed, the Aux. Battery Saver+ periodically activates according to the auxiliary battery status.

· Automatic Mode:

When the ignition switch is in the ON position with the charging connector plugged in, the function activates according to the auxiliary battery status to prevent overdischarge of the auxiliary battery.

### Information

- The Aux. Battery Saver+ activates maximum of 20 minutes. If the Aux. Battery Saver+ function activates more than 10 times consecutively, in the Automatic Mode the function will stop activating, judging that there is a problem with the auxiliary battery. In this case, drive the vehicle for some period of time. The function will start activating if the auxiliary battery returns to normal.
- 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 devises are used.
- If the Aux. Battery Saver+ function was activated, a message will be displayed on the instrument cluster and the high voltage battery level may have decreased.

### System Setting



OAEE046433L

The driver can activate the Aux. Battery Saver+ function by placing the ignition switch to the ON position and by selecting:

'User Settings  $\rightarrow$  Other Features  $\rightarrow$ Aux. Battery Saver+'

The Aux. Battery Saver+ function deactivates, when the driver cancels the system setting.

### LCD Message



This message is displayed when the Aux. Battery Saver+ function has been completed when the vehicle is turned ON.

However, if the LCD message pops up frequently, we recommend that your vehicle's auxiliary battery or electric/electronic components be serviced by an authorized HYUNDAI dealer.

### **A** WARNING



When the function is activating, the third Charging Indicator Lamp will blink 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.

### **Warning and Indicator Lights**

### 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, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### Service Warning Light



### EV Mode Indicator



### Regenerative Brake Warning Light



This warning light illuminates:

- When the ignition switch or the Engine Start/Stop button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a problem with the hybrid vehicle control system or hardware.

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

This indicator illuminates when the vehicle is driven by the electric motor.

### Charging Cable Connection Indicator (Plug-in hybrid vehicle)



This indicator illuminates in red when the charging cable is connected.

### This warning light illuminates:

When the regenerative brake is not operating. This causes the Brake Warning light (red) and Regenerative Brake Warning Light (yellow) to illuminate simultaneously as soon as possible.

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

The service brake still function, however, the operation of the brake pedal may be more difficult than normal and the braking distance can increase.

### **LCD Display Messages**

### Check Hybrid system



This message is displayed when there is a problem with the hybrid control system.

Refrain from driving when the warning message is displayed.

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### Check Hybrid system. Turn off engine



This message is displayed when there is a problem with the hybrid system. The " = " indicator will blink and a warning chime will sound until the problem is solved.

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### Check Hybrid system. Do not start engine



This message is displayed when the hybrid battery power (SOC) level is low. A warning chime will sound until the problem is solved.

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### Stop vehicle and check power supply



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

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

### Stop vehicle to charge battery



This message is displayed when the hybrid battery power (SOC) level is low.

In this case, park the vehicle in a safe location and wait until the hybrid battery is charged.

You can increase the hybrid battery charging rate by holding the accelerator pedal to the floor with transmission in P. The engine will rev high but it will be limited for charging purpose when you hold the pedal to the floor.

### Refuel to prevent Hybrid battery damage



This message is displayed when the fuel tank is nearly empty.

You should refill the fuel tank to prevent hybrid battery damage.

### Refill inverter coolant



This message is displayed when the inverter coolant is nearly empty. You should refill the inverter coolant.

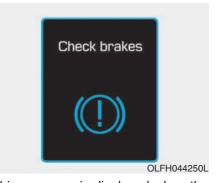
### Stop vehicle and check brakes



This message is displayed when a failure occurs in the brake system. In this case, park the vehicle in a

safe location and we recommend that you tow your vehicle to the nearest authorized HYUNDAI dealer and have the vehicle inspected.

### Check brakes



This message is displayed when the brake performance is low or the regenerative brake does not work properly due to a failure in the brake system.

In this case, it may take longer for the brake pedal to operate and the braking distance may become longer.

### Check Virtual Engine Sound System



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

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### Unplug vehicle to start (Plug-in hybrid vehicle)



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

### Remaining charge time (Plug-in hybrid vehicle)



This message is displayed to notify the remaining time to fully charge the battery.

### Wait until fuel door opens (Plug-in hybrid vehicle)



OAEPH047201L

This message is displayed when you attempt to open the fuel filler door with the fuel tank pressurized. Wait until the fuel tank is depressurized.

### **i** Information

It may take up to 20 seconds to open fuel filler door.

### Check fuel door (Plug-in hybrid vehicle)



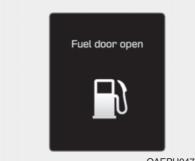
OAEPH047526L

This message is displayed when there is a problem with the fuel filler door. Such as, when the fuel filler door does not open after 20 seconds at freezing temperature.

### Information

When the fuel filler door is frozen and does not open after 20 seconds at freezing temperature, slightly tap the fuel filler door and then attempt to open it. In other cases, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### Fuel door open (Plug-in hybrid vehicle)



OAEPH047525L

This message is displayed when the fuel filler door opens after the fuel tank is depressurized. If this message is displayed, you can refuel the fuel tank

## Check fuel door (Plug-in hybrid vehicle)



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

### Shift to P to charge (Plug-in hybrid vehicle)



This message is displayed when the charging connector is plugged with the shift lever in R (Reverse), N (Neutral) or D (Drive). Move the shift lever to P (Park) and re-start the charging process.

### Charger Error! (Plug-in hybrid vehicle)



This message is displayed when there is a problem with the charger.

## Switching to Hybrid mode to allow heating or air conditioning (Plug-in hybrid vehicle)



OAEPH047207L

This message is displayed when the vehicle automatically switches to HEV mode to allow heating or air conditioning. It is when the coolant temperature is low (below -14°C) and the driver turns on the heating or cooling system.

If the coolant temperature gets higher than -14°C or the driver turns off the heating or cooling system the vehicle returns to its default (EV) mode.

### Maintaining Hybrid mode to allow heating or air conditioning (Plug-in hybrid vehicle)



OAEPH047527L

This message is displayed when the vehicle maintains the HEV mode to allow heating or air conditioning. The mode does not change when the driver presses the [EV/HEV] button to switch from the HEV mode to EV mode while the heating and cooling system is on and the coolant temperature is below -14°C.

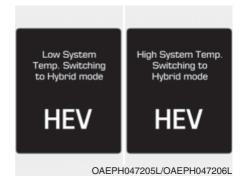
### Low/High System Temp. Maintaining Hybrid mode (Plug-in hybrid vehicle)



OAEPH047203L/OAEPH047204L

This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or too high. This warning message is to protect the battery and the hybrid system.

### Low/High System Temp. Switching to Hybrid mode (Plug-in hybrid vehicle)



This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or high. This warning message is to protect the battery and the hybrid system.

### Switching to Hybrid mode to lubricate engine (Plug-in hybrid vehicle)



This message is displayed when the vehicle is automatically switched to the HEV mode to lubricate engine while the ignition switch is in the ON position.

# Maintaining Hybrid mode to protect engine (Plug-in hybrid vehicle)



This message is displayed when the [EV/HEV] button is pressed but it is impossible to switch from the HEV mode to EV mode due to engine lubrication.

### Exit SPORT to switch to electric mode (Plug-in hybrid vehicle)



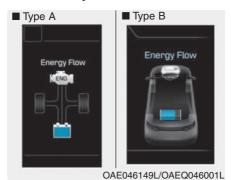
OAEPH047531L

This message is displayed when [EV/HEV] button is pressed but it is impossible to switch from the HEV mode to EV mode because the SPORT mode is engaged.

### **Energy Flow**

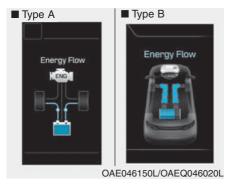
The hybrid system informs the drivers its energy flow in various operating modes. While driving, the current energy flow is specified in 11 modes.

### Vehicle Stop



The vehicle is stopped. (No energy flow)

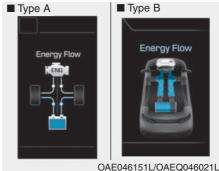
### **EV Propulsion**



Only the motor power is used to drive the vehicle.

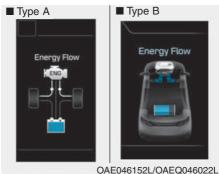
(Battery → Wheel)

#### Power Assist



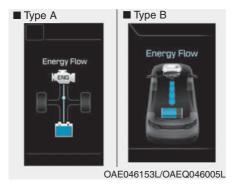
Both the motor and the engine power are used to drive the vehicle. (Battery & Engine → Wheel)

### **Engine Only Propulsion**



Only the engine power is used to drive the vehicle. (Engine → Wheel)

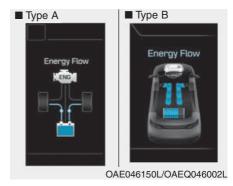
Engine Generation



When the vehicle is stopped, the high-voltage battery is charged up by the engine.

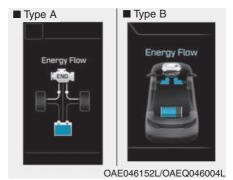
(Engine → Battery)

### Regeneration



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

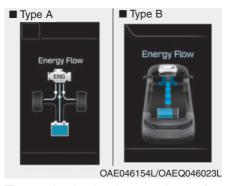
### Engine Brake



The engine braking is used to decelerate the vehicle.

(Wheel → Engine)

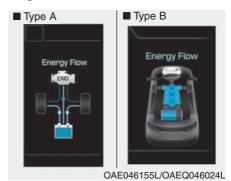
### Power Reserve



The engine is simultaneously used to drive the vehicle and to charge up the high-voltage battery.

(Engine → Wheel & Battery)

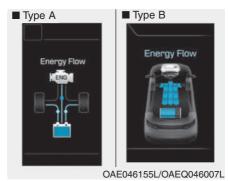
### Engine Generation/Motor Drive



The engine charges up the high-voltage battery. The motor power is used to drive the vehicle.

(Engine → Battery → Wheel)

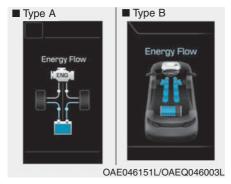
### Engine Generation/Regeneration



The engine and regenerative brake system charges up the high-voltage battery.

(Engine & Wheel → Battery)

### Engine Brake/Regeneration



The engine braking is simultaneously used to decelerate the vehicle and to charge up the high-voltage battery.

(Wheel → Engine & Battery)

#### SAFETY PRECAUTIONS FOR HYBRID SYSTEM

### **Hybrid Vehicle Components Safety Precautions**

#### High Voltage Battery System





- \*1: Located in the engine compartment
- \*2: Located under the rear seats

### **A** WARNING

Never touch orange colored or high voltage labeled components, including wires, cables, and connections. When the insulators or covers are damaged or removed, severe injury or death from electrocution may occur.

### **A** WARNING

While replacing the fuses in the engine compartment, never touch the HPCU. The HPCU carries high voltage. Touching the HPCU may result in electrocution, serious injury, or death.

### SAFETY PRECAUTIONS FOR HYBRID SYSTEM (CONT.)

### **A WARNING**

In the hybrid system, the hybrid battery uses high voltage to operate the motor and other components. This high voltage hybrid battery system can be very dangerous.

Never touch the hybrid system. When you touch the hybrid battery system, serious injury or death may occur.

### **A** CAUTION

- Do not pile up any items in an area behind the high voltage battery. In a crash, the battery may become unstable, or its performance may degrade.
- Do not apply strong force nor pile up any items above the luggage compartment. Such an attempt may distort the high voltage battery case, causing a safety problem or degrading the performance.
- Be careful when loading flammable liquid in luggage compartment. It could cause operational and safety degradation if the liquid leaks and flows in high voltage battery.



\*3: Located in the engine compartment

### **A** WARNING

- Do not disassemble the high voltage motor connector. The high voltage motor connector may contain residual high voltage. Coming in contact with high voltage may result in death or serious injury.
- Your vehicle's hybrid system should only be inspected or repaired by an authorized HYUNDAI dealer.

### **A WARNING**

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

### **A** WARNING

Never assemble or disassemble the high voltage battery system.

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

### **▲** WARNING

- Never use the package modules (high voltage battery, inverter and converter) for any other purpose.
- Do not use an unauthorized battery charger to charge the high voltage battery. Doing so may result in death or serious injury.
- Never locate the high voltage system near or in a fire.
- Never drill into or strike the package module. Otherwise, it may be damaged. An electric shock may occur, resulting in serious injury or death.

### NOTICE

- When the vehicle is paint baked, do not bake over 30 minutes in 70°C (158°F) or 20 minutes in 80°C (176°F) degree.
- Do not wash the engine compartment, using water. Water may cause an electric shock to and damage the electronic.

### SAFETY PRECAUTIONS FOR HYBRID SYSTEM (CONT.)

### **A** WARNING

This hybrid vehicle uses the hybrid battery system inverter and converter to generate high voltage. High voltage in the hybrid battery system is very dangerous and may cause severe burns and electric shock. This may result in serious injury or death.

- For your safety, never touch, replace, disassemble or remove the hybrid battery system including components, cables and connectors. Severe burns or electric shock may result in serious injury or death when you fail to follow this warning.
- When the hybrid battery system operates, the hybrid battery system can be hot. Always be careful because burns or electric shock may be caused by high voltage.

(Continued)

### (Continued)

 Do not drop water or liquid on to HPCU, HSG, motor and fuses. The hybrid system components are covered. If you drop water or liquid on to hybrid system components, it may result in electric shock.

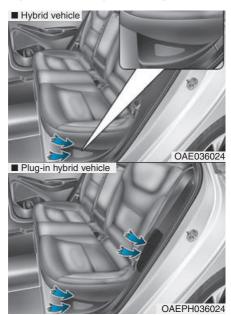
### **Service Plug**

### **A** DANGER



Never touch the service plug. Service plug is attached to high voltage hybrid battery system. Touching the service plug will result in death or serious injury. Service personnel should follow procedure in service manual.

### **Hybrid Battery Cooling Duct**



The hybrid battery cooling duct is located on the left side of the rear seats. The cooling duct cools down the hybrid battery. When the hybrid battery cooling duct is blocked, the hybrid battery may be overheated.

Do not obstruct the cooling duct with any other objects.

### **▲** WARNING

- Never clean the cooling duct of the hybrid battery with a wet cloth. If any water enters in the cooling duct of the hybrid battery, the hybrid battery may cause an electric shock, resulting in a serious damage, an injury or a death.
- The hybrid battery is composed of lithium-ion polymer.
   If the hybrid battery is improperly handled, it is dangerous to the environment. Also it may cause electrical shock and severe burns, resulting in a serious injury or a death.
- Do not spill liquid over the cooling duct of the hybrid battery. Doing so is very dangerous. It may cause electric shock or serious injury.
- Do not cover the cooling duct with objects.

(Continued)

### (Continued)

- Do not put any objects into the cooling duct of the hybrid battery. Doing so may cause loss of cooling duct volume to the hybrid battery. When the cooling duct is blocked with any objects, immediately contact your HYUNDAI dealer.
- Never place a container of liquid on or near the cooling duct. If the liquid spills, the hybrid battery located in the luggage compartment may be damaged.
- Secure all loads in the luggage compartment to prevent them from being tossed about before driving. When a sharp or heavy load strike with a strong impact or pierce the interior luggage compartment wall, the hybrid battery system may be damaged, deteriorating its performance.

### **i** Information

Clean the cooling duct for the hybrid battery with a dry cloth on a regular basis.

### SAFETY PRECAUTIONS FOR HYBRID SYSTEM (CONT.)

#### If an Accident Occurs

### **A** WARNING

- For your safety, do not touch high voltage cables, connectors and package modules. High voltage components are orange in color.
- Exposed cables or wires may be visible inside or outside of the vehicle. Never touch the wires or cables, because an electrical shock, an injury, or a death may occur.
- Any gas or electrolyte leakage from your vehicle is not only poisonous but also flammable. Upon witnessing one of those, open the windows, and remain a safe distance from the vehicle out of the road.

Immediately call an emergency services or contact an authorized HYUNDAI dealer and advise them that a hybrid vehicle is involved.

(Continued)

#### (Continued)

 When the vehicle is severely damaged, remain a safe distance of 15 meter or more between your vehicle and other vehicles/flammables.

#### **A** WARNING

#### If a fire occurs:

 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, remain a safe distance from the vehicle and immediately call your local fire emergency responders. Also, advise them that a hybrid vehicle is involved.

If the fire spreads to the high voltage battery, large amount of water is needed to put out the fire.

(Continued)

### (Continued)

- Using small amount of water or fire extinguishers not meant for electrical fires could cause serious injury or death from electrical shocks.
- Upon witnessing any sparks, gases, flames, or fuel leakage of your vehicle, immediately call emergency services or contact an authorized HYUNDAI dealer. Also, advise them that a hybrid vehicle is involved.

### **A** WARNING

When a submersion in water occurs:

When your vehicle is flooded in water, a high-voltage battery may cause shock or fires. Thus, turn the hybrid system OFF, take the key in your possession and escape to a safe place. Never attempt physical contact with your flooded vehicle.

Immediately contact an authorized HYUNDAI dealer and advise them that a hybrid vehicle is involved.

### When the Hybrid Vehicle Shuts Off

When the high voltage battery is discharged, when the 12-volt battery is discharged, or when the fuel tank is empty, the hybrid system may not operate while driving. When the Hybrid system does not operate, do the followings:

- 1.Gradually reduce the vehicle speed. Pull over your vehicle off the road in a safe area.
- 2. Locate the shift lever in P (Park).
- 3. Turn ON the hazard warning flashers.
- 4.Turn OFF the vehicle, and try to start the hybrid system again, while depressing the brake pedal and turning on the ignition switch.

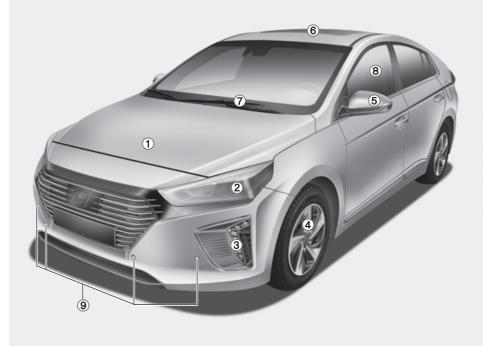
5. When the hybrid system still does not operate, refer to "If the 12 Volt Battery Is Discharged" in chapter 6. Before jump-starting the vehicle, check the fuel level and the exact procedure to jump start. For further details, refer to "If the 12 Volt Battery Is Discharged" in the chapter 6. When the fuel level is low, do not attempt to drive the vehicle only with the battery power. The high voltage battery may be discharged, and the hybrid system will turn OFF.

### Your vehicle at a glance

| Hybrid vehicle                 |      |
|--------------------------------|------|
| Exterior overview (I)          | 1-2  |
| Exterior overview (II)         |      |
| Interior overview (I)          |      |
| Interior overview (II)         |      |
| Instrument panel overview (I)  |      |
| Instrument panel overview (II) |      |
| Engine compartment             |      |
| Engine compartment             |      |
| Plug-in hybrid vehicle         |      |
| Exterior overview (I)          | 1-9  |
| Exterior overview (II)         | 1-10 |
| Interior overview (I)          |      |
| Interior overview (II)         |      |
| Instrument panel overview (I)  |      |
| Instrument panel overview (II) |      |
| Engine compartment             |      |

### **EXTERIOR OVERVIEW (I) - HYBRID VEHICLE**

■ Front view

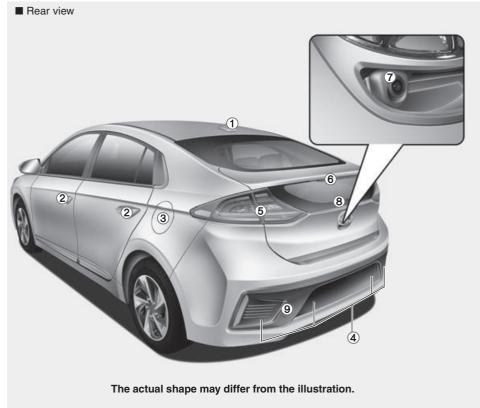


| 1. Hood3-36                               |
|---|
| 2. Headlamp7-68                           |
| 3. Daytime running light (DRL)3-111, 7-76 |
| 4. Tires and wheels7-42, 8-4              |
| 5. Outside rearview mirror3-24            |
| 6. Sunroof3-32                            |
| 7. Front windshield wiper blades7-35      |
| 8. Windows3-27                            |
| 9. Parking assist system 3-124            |

The actual shape may differ from the illustration.

OAE016001

### **EXTERIOR OVERVIEW (II) - HYBRID VEHICLE**

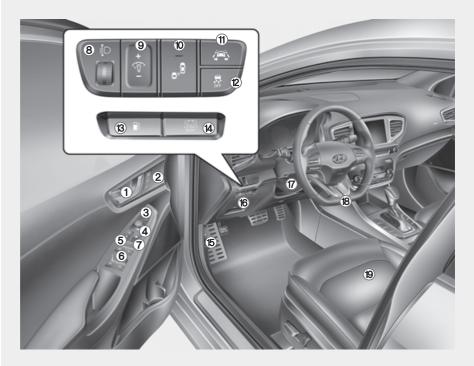


| 1. Antenna  | 4-2   |
|---|-------|
| 2. Doors  | 3-12  |
| 3. Fuel filler door                                     | 3-39  |
| 4. Parking assist system/<br>Rear parking assist system |       |
| 5. Rear combination lamp                                | 7-77  |
| 6. High mounted stop lamp                               | 7-82  |
| 7. Rearview camera                                      | 3-120 |
| 8. Tailgate   | 3-38  |
| 9. Towing hook  | 6-44  |

OAE016002

### INTERIOR OVERVIEW (I) - HYBRID VEHICLE

■ Left-hand drive



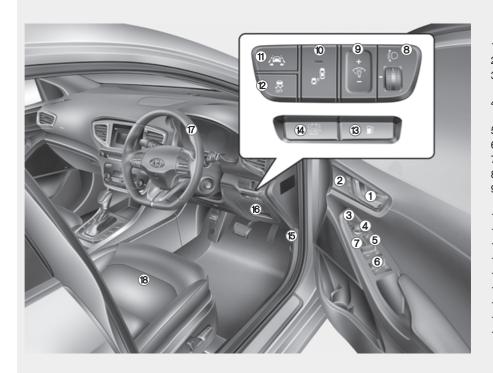
| 1. Door lock/unlock button                 | 3-14   |
|--|--------|
| 2. Driver position memory system           | 3-18   |
| 3. Outside rearview mirror folding         |        |
| switch                                     | 3-26   |
| 4. Outside rearview mirror control         | 0.05   |
| switch                                     |        |
| 5. Central door lock switch                |        |
| 6. Power window switches                   |        |
| 7. Power window lock switch                |        |
| 8. Headlamp leveling device                | .3-112 |
| 9. Instrument panel illumination           | 0.47   |
| control switch                             |        |
| 10. Blind spot detection system button     |        |
| 11. Lane keeping assist system             |        |
| 12. ESC OFF button                         |        |
| 13. Fuel filler door opener                |        |
| 14. 12V battery reset switch               |        |
| 15. Hood release lever                     |        |
| 16. Fuse box                               |        |
| 17. Steering wheel tilt/telescopic lever . |        |
| 18. Steering wheel                         |        |
| 19. Seat                                   | 2-4    |

The actual shape may differ from the illustration.

OAEPH017007L

### INTERIOR OVERVIEW (II) - HYBRID VEHICLE

■ Right-hand drive



| 1. Door lock/unlock button             | 3-14   |
|--|--------|
| 2. Driver position memory system       | 3-18   |
| 3. Outside rearview mirror folding     |        |
| switch                                 | 3-26   |
| 4. Outside rearview mirror control     |        |
| switch                                 | 3-25   |
| 5. Central door lock switch            | 3-14   |
| 6. Power window switches               | 3-27   |
| 7. Power window lock switch            | 3-31   |
| 8. Headlamp leveling device            | .3-112 |
| 9. Instrument panel illumination       |        |
| control switch                         | 3-47   |
| 10. Blind spot detection system button | 5-40   |
| 11. Lane keeping assist system         | 5-62   |
| 12. ESC OFF button                     |        |
| 13. Fuel filler door opener            | 3-39   |
| 14. 12V battery reset switch           | 6-5    |
| 15. Hood release lever                 | 3-36   |
| 16. Fuse box                           |        |
| 17. Steering wheel                     | 3-20   |
| 18. Seat                               | 2-4    |

The actual shape may differ from the illustration.

OAEPH017008L

### INSTRUMENT PANEL OVERVIEW (I) - HYBRID VEHICLE

| eft-hand drive                                     | ■ Left-hand drive |
|--|-------------------|
|  | 20 2              |
| The actual shape may differ from the illustration. |                   |

| 1. Instrument cluster   | 3-45           |
|---|----------------|
| 2. Horn   | 3-22           |
| 3. Driver's front air bag   | 2-54           |
| 4. Key ignition switch/ Engine Start/Stop button                          | 5-6<br>5-9     |
| 5. Light control/Turn signals   | 3-107          |
| 6. Wiper/Washer   | 3-117          |
| 7. Audio system/  |                |
| 8. Hazard warning flasher   | 6-2            |
| 9. Automatic climate control system                                       | 3-127          |
| 10. Dual clutch transmission  | 5-15           |
| 11. Passenger's front air bag   | 2-54           |
| 12. Glove box   | 3-145          |
| 13. Cigarette lighter   | 3-152          |
| 14. Power outlet  | 3-149          |
| 15. Wireless cellular phone charging system                               | 3-150          |
| 16. Seat warmer/Air ventilation seat                                      | 2-21           |
| 17. Heated steering wheel   | 3-21           |
| 18. Parking assist system ON button/ Rear paring assist system OFF button | 3-124<br>3-122 |
| 19. Cup holder  | 3-147          |
| 20. Steering wheel audio controls/  |                |
| 21. Speed limiter/  |                |
| Cruise controls/Smart cruise controls                                     |                |

OAE017004L

### INSTRUMENT PANEL OVERVIEW (II) - HYBRID VEHICLE

| Right-hand drive                                   | 1. Instrument cluster3-45   |
|--|---|
|  | 2. Horn3-22   |
|  | 3. Driver's front air bag2-54   |
|  | 4. Key ignition switch/5-6 Engine Start/Stop button5-9                              |
|  | 5. Light control/Turn signals3-107  |
| 1) 7 6 5   | 6. Wiper/Washer3-117  |
|  | 7. Audio system/4-8 Navigation system4-5  |
| 2  | 8. Hazard warning flasher6-2  |
| 9-9-   | 9. Automatic climate control system3-127  |
| 403  | 10. Dual clutch transmission5-15  |
|  | 11. Passenger's front air bag2-54   |
| 0  | 12. Glove box3-145  |
|  | 13. Cigarette lighter3-152  |
|  | 14. Power outlet3-149   |
| 18 16  | 15. Wireless cellular phone charging system3-150                                    |
|  | 16. Seat warmer/Air ventilation seat2-21  |
|  | 17. Heated steering wheel3-21   |
| 7 6  | 18. Parking assist system ON button/3-124 Rear paring assist system OFF button3-122 |
|  | 19. Cup holder3-147   |
|  | 20. Steering wheel audio controls/4-3<br>Bluetooth® wireless technology             |
|  | hands-free controls4-4  |
|  | 21. Speed limiter/  |
| The cetual change may differ from the illustration | Smart cruise controls5-73   |
| The actual shape may differ from the illustration. | OAEPH017005   |

### ENGINE COMPARTMENT - HYBRID VEHICLE

■ Gasoline Engine (Kappa 1.6 GDI)

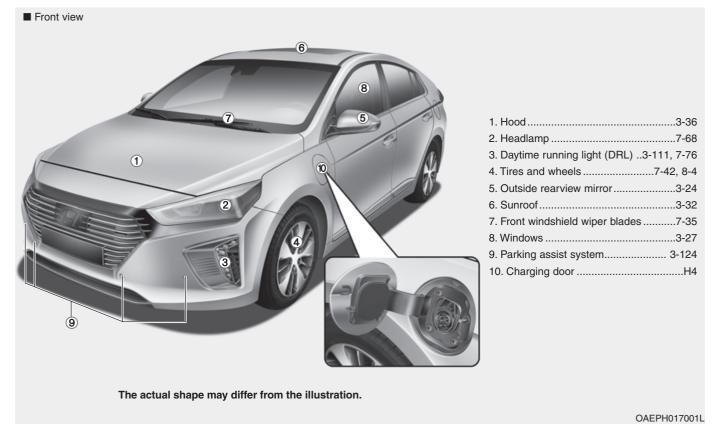


| 1. Engine oil filler cap             | 7-24 |
|--------------------------------------|------|
| 2. Engine oil dipstick               | 7-23 |
| 3. Engine coolant cap                | 7-26 |
| 4. Engine coolant reservoir          | 7-25 |
| 5. Inverter coolant reservoir        | 7-25 |
| 6. Brake fluid reservoir             | 7-29 |
| 7. Air cleaner                       | 7-31 |
| 8. Windshield washer fluid reservoir | 7-30 |
| O. F                                 | 7    |

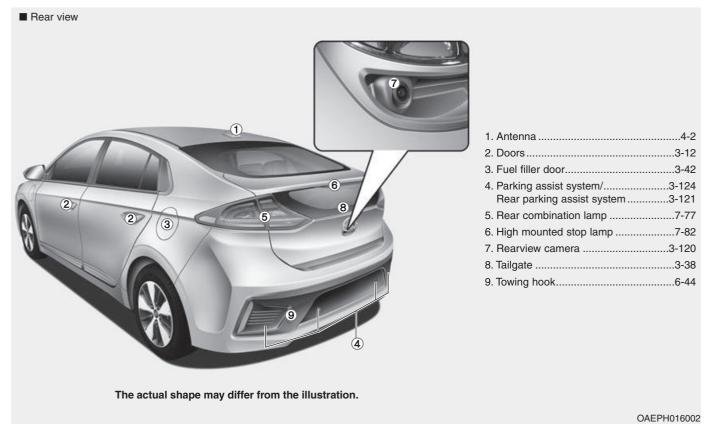
The actual engine compartment in the vehicle may differ from the illustration.

OAE076001

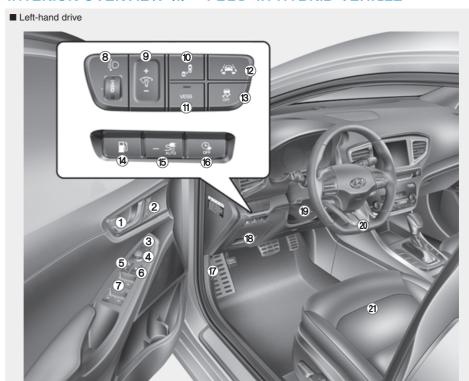
### EXTERIOR OVERVIEW (I) - PLUG-IN HYBRID VEHICLE



## EXTERIOR OVERVIEW (II) - PLUG-IN HYBRID VEHICLE



# INTERIOR OVERVIEW (I) - PLUG-IN HYBRID VEHICLE

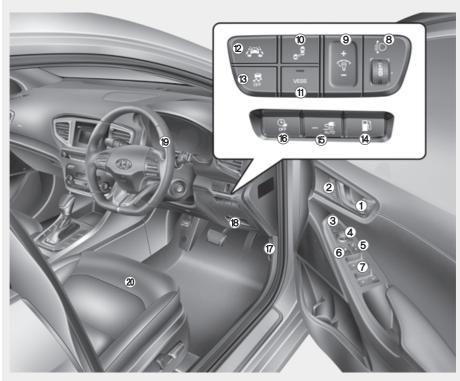


| 1 Dear leak/unleak button  |  |
|--|--|
| 1. Door lock/unlock button   | 3-14   |
| 2. Driver position memory system   | 3-18   |
| 3. Outside rearview mirror folding   |  |
| switch   | 3-26   |
| 4. Outside rearview mirror control   |  |
| switch   | 3-25   |
| 5. Central door lock switch  | 3-14   |
| 6. Power window lock switch  | 3-27   |
| 7. Power window switches   | 3-31   |
| 8. Headlight leveling device   | .3-112   |
| 9. Instrument panel illumination   |  |
| control switch   |  |
| 10. Blind spot detection system button   | 5-40   |
| 11. VESS (Virtual Engine Sound Syste   | m)   |
| button   | H28  |
|  | 1 120  |
| 12. Lane keeping assist system   |  |
|  | 5-62   |
| 12. Lane keeping assist system   | 5-62<br>5-33                                       |
| 12. Lane keeping assist system   | 5-62<br>5-33<br>3-42                               |
| 12. Lane keeping assist system   | 5-62<br>5-33<br>3-42                               |
| 12. Lane keeping assist system   | 5-62<br>5-33<br>3-42<br>onH7                       |
| Lane keeping assist system      Sec OFF button      Fuel filler door opener      AUTO/LOCK mode selection butto     Scheduled charging deactivation                                  | 5-62<br>5-33<br>3-42<br>onH7                       |
| Lane keeping assist system      Sec OFF button      Fuel filler door opener      AUTO/LOCK mode selection button      Scheduled charging deactivation button                         | 5-62<br>5-33<br>3-42<br>onH7<br>H6<br>3-36         |
| Lane keeping assist system      Sec OFF button      Huel filler door opener      AUTO/LOCK mode selection button      Scheduled charging deactivation button      Hood release lever | 5-62<br>5-33<br>3-42<br>onH7<br>H6<br>3-36         |
| Lane keeping assist system   | 5-62<br>5-33<br>3-42<br>onH7<br>H6<br>3-36<br>7-54 |

OAEPH017006L

## INTERIOR OVERVIEW (II) - PLUG-IN HYBRID VEHICLE

■ Right-hand drive



The actual shape may differ from the illustration.

| 1. Door lock/unlock button3-14                                    |
|---|
| 2. Driver position memory system3-18                              |
| 3. Outside rearview mirror folding                                |
| switch3-26  |
| 4. Outside rearview mirror control                                |
| switch3-25  |
| 5. Central door lock switch3-14                                   |
| 6. Power window lock switch3-27                                   |
| 7. Power window switches3-31                                      |
| 8. Headlight leveling device3-112                                 |
| 9. Instrument panel illumination                                  |
| control switch3-47  |
| 10. Blind spot detection system button5-40                        |
| 11. VESS (Virtual Engine Sound System)                            |
| buttonH28   |
| 12. Lane keeping assist system5-62                                |
| 13. ESC OFF button5-33  |
| 14. Fuel filler door opener3-42                                   |
| 15. AUTO/LOCK mode selection buttonH7                             |
| 16. Scheduled charging deactivation                               |
| latt.a.m  |
| buttonH6  |
| 17. Hood release lever3-36  |
| 17. Hood release lever       3-36         18. Fuse box       7-54 |
| 17. Hood release lever3-36  |

OAEPH017006R

# INSTRUMENT PANEL OVERVIEW (I) - PLUG-IN HYBRID VEHICLE

| ■ Left-hand drive                                  |
|--|
| The actual shape may differ from the illustration. |
| The detail onepe may affer from the maditation.    |

| 1. Instrument cluster3-45  |
|--|
| 2. Horn3-22  |
| 3. Driver's front air bag2-54  |
| 4. Key ignition switch/5-6 Engine Start/Stop button5-9                                       |
| 5. Light control/Turn signals3-107   |
| 6. Wiper/Washer3-117   |
| 7. Audio system/   |
| 8. Hazard warning flasher6-2   |
| 9. Automatic climate control system3-127   |
| 10. Dual clutch transmission5-15   |
| 11. Passenger's front air bag2-54  |
| 12. Glove box3-145   |
| 13. Cigarette lighter3-152   |
| 14. Power outlet3-149  |
| 15. Wireless cellular phone charging system3-150   |
| 16. Seat warmer/Air ventilation seat2-21   |
| 17. Heated steering wheel3-21  |
| 18. EV/HEV buttonH-30  |
| 19. Parking assist system ON button/3-124 Rear paring assist system OFF button3-122          |
| 20. Cup holder3-147  |
| 21. Steering wheel audio controls/4-3  Bluetooth® wireless technology hands-free controls4-4 |
| 22. Speed limiter/   |
| OAEPH016004L   |

# INSTRUMENT PANEL OVERVIEW (II) - PLUG-IN HYBRID VEHICLE

| ■ Right-hand drive                                 | 1. Instrument cluster3-45  |
|--|--|
|  | 2. Horn3-22  |
|  | 3. Driver's front air bag2-54  |
|  | 4. Key ignition switch/5-6   |
|  | Engine Start/Stop button5-9  |
|  | 5. Light control/Turn signals3-107   |
| 7 6 5  | 6. Wiper/Washer3-117   |
| 2 2  | 7. Audio system/   |
| 2 8 4 3  | 8. Hazard warning flasher6-2   |
|  | 9. Automatic climate control system3-127   |
| 9  | 10. Dual clutch transmission5-15   |
| a B  | 11. Passenger's front air bag2-54  |
| 0  | 12. Glove box3-145   |
| 7 M =  | 13. Cigarette lighter3-152   |
|  | 14. Power outlet3-149  |
|  | 15. Wireless cellular phone charging system3-150   |
| 16 / 12  | 16. Seat warmer/Air ventilation seat2-21   |
| 9  | 17. Heated steering wheel3-21  |
|  | 18. EV/HEV buttonH-30  |
| 16   | 19. Parking assist system ON button/3-124  |
| 18 77  | Rear paring assist system OFF button3-122  |
|  | 20. Cup holder3-147  |
|  | 21. Steering wheel audio controls/4-3  Bluetooth® wireless technology hands-free controls4-4 |
|  | 22. Speed limiter/   |
| The actual shape may differ from the illustration. | Smart cruise controls5-79  |
|  | OAEPH017004  |

## ENGINE COMPARTMENT - PLUG-IN HYBRID VEHICLE

■ Gasoline Engine (Kappa 1.6 GDI)



| 1. Engine oil filler cap               | 7-24 |
|--|------|
| 2. Engine oil dipstick                 | 7-23 |
| 3. Engine coolant cap                  | 7-26 |
| 4. Engine coolant reservoir            | 7-25 |
| 5. Inverter coolant reservoir          | 7-25 |
| 6. Brake fluid reservoir               | 7-29 |
| 7. Air cleaner                         | 7-31 |
| 8. Windshield washer fluid reservoir . | 7-30 |
| 9. Fuse box                            | 7-55 |

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

OAEPH076001

# Safety system of your vehicle

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

| Important safety precautions            |      |
|---|------|
| Restrain all children                   |      |
| Air bag hazards                         |      |
| Driver distraction                      |      |
| Control your speed                      |      |
| Keep your vehicle in safe condition     |      |
| Seats                                   | 2-4  |
| Safety precautions                      |      |
| Front seats                             |      |
| Rear seats                              |      |
| Headrest                                | 2-16 |
| Seat warmers and air ventilation seats  | 2-21 |
| Seat belts                              | 2-25 |
| Seat belt safety precautions            | 2-25 |
| Seat belt warning light                 | 2-26 |
| Seat belt restraint system              |      |
| Additional seat belt safety precautions |      |
| Care of seat belts                      | 2-36 |
|   |      |

| Child restraint system (CRS)2                   | -38  |
|---|------|
| Our recommendation:Children always in the rear2 | 2-38 |
| Selecting a Child Restraint System (CRS)2       | 2-39 |
| Installing a Child Restraint System (CRS)2      | 2-41 |
| Air bag - supplemental restraint system2        | -51  |
| Where are the air bags?2                        | 2-54 |
| How does the air bags system operate?2          | -59  |
| What to expect after an air bag inflates2       | -63  |
| Why didn't my air bag go off in a collision?2   | -65  |
| SRS care2                                       | -70  |
| Additional safety precautions2                  | 2-71 |
| Air bag warning labels2                         | -72  |

#### 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 (i.e., 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 countries have laws prohibiting drivers from texting. Some countries and cities also prohibit drivers from using handheld phones.

 NEVER let the use of a mobile device distract you from driving. You have a responsibility to your passengers and others on the road to always drive safely, with your hands on the wheel as well as your eyes and attention on the road.

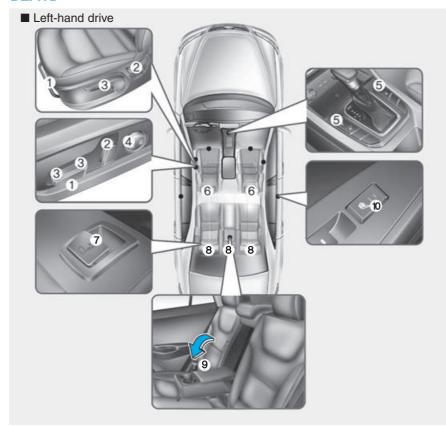
## **Control your speed**

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

# Keep your vehicle in safe condition

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

## **SEATS**



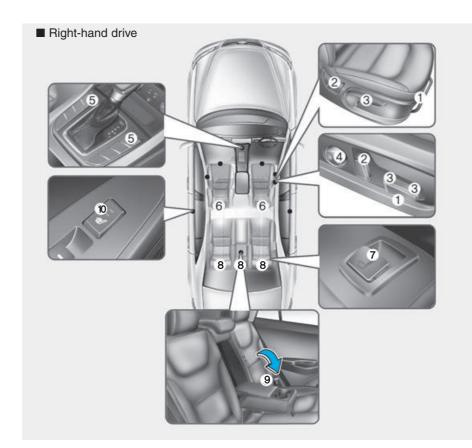
#### Front seat

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

#### 2nd row seat

- 7. Seatback angle and folding
- 8. Headrest
- 9. Armrest
- 10. Seat warmer\*
- \*: if equipped

OAEPH036001



#### 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. Headrest

#### 2nd row seat

- 7. Seatback angle and folding
- 8. Headrest
- 9. Armrest
- 10. Seat warmer\*
- \*: if equipped

OAE036001R

## **Safety precautions**

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

## **A** WARNING

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

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

## Air bags

You can take steps to reduce the risk of being injured by an inflating air bag. Sitting too close to an air bag greatly increases the risk of injury in the event the air bag inflates. Move your seat as far back as possible from front air bags, while still maintaining control of the vehicle.

#### **A** WARNING

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

- Adjust the driver's seat as far to the rear as possible maintaining the ability to control the vehicle.
- Adjust the front passenger seat as far to the rear as possible.

(Continued)

## (Continued)

- Hold the steering wheel by the rim with 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.

## **A 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.

(Continued)

## (Continued)

- 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 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.

#### **A** 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.

(Continued)

#### (Continued)

- 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.

## **A** 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.

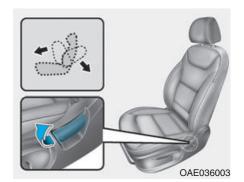
## Manual adjustment



## Forward and rearward adjustment

To move the seat forward or rearward:

- 1. Pull up the seat slide adjustment lever and hold it.
- 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:

- Lean forward slightly and lift up the seathack lever
- Carefully lean back on the seat and adjust the seatback to the position you desire.
- Release the lever and make sure the seatback is locked in place. (The lever MUST return to its original position for the seatback to lock.)

## Reclining seatback

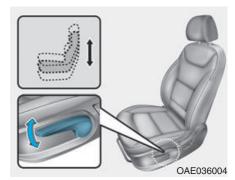
Sitting in a reclined position when the vehicle is in motion can be dangerous. Even when buckled up, the protections of your restraint system (seat belts and/or air bags) is greatly reduced by reclining your seatback.

## **A** WARNING

NEVER ride with a reclined seatback when the vehicle is moving. Riding with a reclined seatback increases your chance of serious or fatal injuries in the event of a collision or sudden stop.

Drivers and passengers should ALWAYS sit well back in their seats, properly belted, and with the seatbacks upright. 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 (for driver's seat)
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)

## **A** WARNING

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

## **A** CAUTION

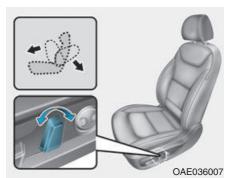
To prevent damage to the seats:

- 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 engine 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:

- 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

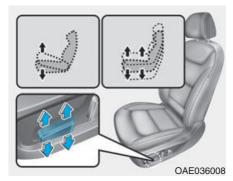
Sitting in a reclined position when the vehicle is in motion can be dangerous. Even when buckled up, the protections of your restraint system (seat belts and air bags) is greatly reduced by reclining your seatback.

## **A** 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, 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 (if equipped)
To change the height of the seat cushion:

- Push the front portion of the control switch up to raise or down to lower the front part of the seat cushion.
  - Push the rear portion of the control switch up to raise or down to lower the height of the seat cushion.
- 2. Release the switch once the seat reaches the desired position.



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

- The lumbar support can be adjusted by pressing the lumbar support switch.
- Press the front portion of the switch (1) to increase support or the rear portion of the switch (2) to decrease support.

## Seatback pocket



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

## **A** CAUTION

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

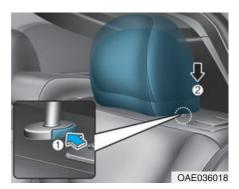
#### **Rear seats**

# Folding the rear seat (if equipped)

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

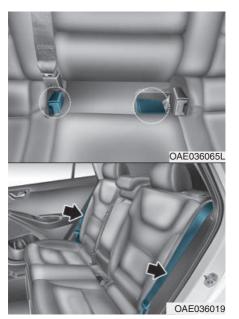
## **A** WARNING

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



To fold down the rear seatback:

- 1. Set the front seatback to the upright position.
- 2. Lower the rear headrests down(2) pushing the adjusting button(1).



3.Locate the seatbelt toward the outboard position before folding down the seatback to avoid the seatbelt system interfering with the seatback.



4.Pull on the seatback folding lever, 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.

## **A** 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.

#### Armrest



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

#### Headrest

The vehicle's front and rear seats have adjustable headrests. The headrests 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.

#### A WARNING

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

- Always properly adjust the headrests for all passengers BEFORE starting the vehicle.
- NEVER let anyone ride in a seat with the headrest removed.

(Continued)

## (Continued)



Adjust the headrests so the middle of the headrest is at the same height as the height of the top of the eyes.

OLF034072N

- NEVER adjust the headrest position of the driver's seat when the vehicle is in motion.
- Adjust the headrest 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 headrest locks into position after adjusting it.

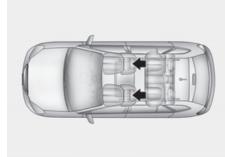
#### NOTICE

To prevent damage, NEVER hit or pull on the headrests.

## **A** CAUTION

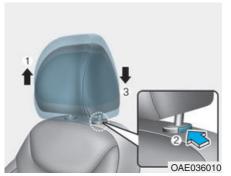
When there is no occupant in the rear seats, adjust the height of the headrest to the lowest position. The rear seat headrest can reduce the visibility of the rear area.

#### Front seat headrests



OPDE036068

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

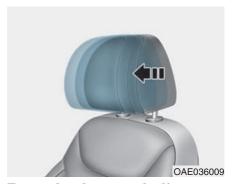


Adjusting the height up and down To raise the headrest:

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

To lower the headrest:

- Push and hold the release button
   on the headrest support.
- 2. Lower the headrest to the desired position (3).



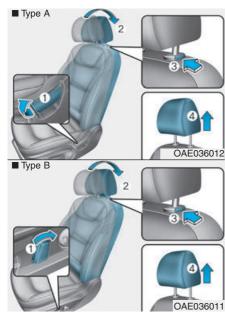
Forward and rearward adjustment (if equipped)

The headrest may be adjusted forward to 3 different positions by pulling the headrest forward to the desired detent. To adjust the headrest 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 headrest and seat cushion raised, the headrest may come in contact with the sunvisor or other parts of the vehicle.



Removal/Reinstall

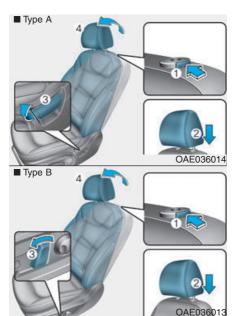
To remove the headrest:

- Recline the seatback (2) with using the seatback angle lever or switch (1).
- 2. Raise the headrest as far as it can go.

3. Press the headrest release button (3) while pulling the headrest up (4).

## **A** WARNING

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



To reinstall the headrest:

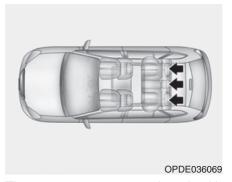
- 1. Recline the seatback.
- 2. Put the headrest poles (2) into the holes while pressing the release button (1).
- 3. Adjust the headrest to the appropriate height.

4. Recline the seatback (4) with the seatback angle lever or switch (3).

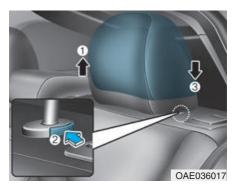
## **A** WARNING

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

#### Rear seat headrests



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

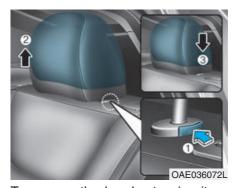


Adjusting the height up and down To raise the headrest:

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

To lower the headrest:

- Push and hold the release button
   on the headrest support.
- 2. Lower the headrest to the desired position (3).



To remove the headrest, raise it as far as it can go then press the release button (1) while pulling the headrest up (2).

To reinstall the headrest, put the headrest poles (3) into the holes while pressing the release button (1). Then adjust it to the appropriate height.

## **A** WARNING

Make sure the headrest 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.

## **A** 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.

(Continued)

## (Continued)

- Fatigued individuals.
- Intoxicated individuals.
- People taking medication that can cause drowsiness or sleepiness.

## **A** 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 engine 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:

$$\begin{array}{ccc} \mathsf{OFF} & \to & \mathsf{HIGH} \, (\blacksquare \blacksquare \blacksquare) \\ \uparrow & & \downarrow \\ \mathsf{LOW} \, (\blacksquare) & \leftarrow & \mathsf{MIDDLE} \, (\blacksquare \blacksquare) \end{array}$$

- 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 ignition switch is placed to the ON position.

## Information

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

# Front air ventilation seat (if equipped)



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 seat-backs.

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

While the engine 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 defaults to the OFF position whenever the ignition switch 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.

(Continued)

#### (Continued)

- 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, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

#### Rear seat warmers (if equipped)



While the engine is running, push either of the switches to warm the rear 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:

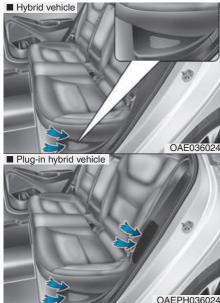
$$\begin{array}{ccc} \mathsf{OFF} \, \to \, \mathsf{HIGH} \, ( \begin{array}{c} & & \\ & & \end{array} ) \, \to \, \mathsf{LOW} \, ( \begin{array}{c} & & \\ & & \end{array} ) \\ \uparrow & & & \end{array}$$

The seat warmer defaults to the OFF position whenever the ignition switch 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.

## Battery cooling duct



The hybrid battery cooling duct is located on the left side of the rear seats. The cooling duct cools down the hybrid battery.

When the hybrid battery cooling duct is blocked, the hybrid battery may be overheated. Do not obstruct the cooling duct with any other objects.

#### **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 (if equipped) are designed to supplement the seat belt as an additional safety device, but they are not a substitute. Most countries require all occupants of a vehicle to wear seat belts.

#### **A** 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 properly restrain them in the seat.
- 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.

(Continued)

#### (Continued)

- 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.
   This may prevent the seat belt from fastening securely.

(Continued)

## (Continued)

 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.

#### **A 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



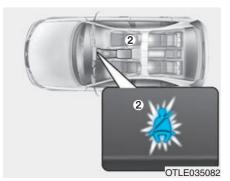
#### Driver's seat belt warning

As a reminder to the driver, the seat belt warning light will illuminate and chime for approximately 6 seconds each time you turn the ignition switch ON regardless of belt fastening.

If the driver's seat belt is unfastened after the ignition switch is ON, the seat belt warning light illuminates until the belt is fastened.

If you start to drive without fastening the seatbelt, warning light will continue to illumiante until you fasten the seatbelt.

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



Front passenger's seat belt warning (if equipped)

As a reminder to the front passenger, the front passenger's seat belt warning lights will illuminate for approximately 6 seconds each time you turn the ignition switch ON regardless of belt fastening.

If the front passenger's seat belt is not fastened when the ignition switch is turned ON or if it is disconnected after the ignition switch is turned ON, the corresponding seat belt warning light will illuminate until the belt is fastened.

If you continue not to fasten the seat belt and you drive over 9km/h, the illuminated warning light will start to blink until you drive under 6km/h.

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

## **A** 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 properly be seated as instructed in this manual.

## 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)

If the ignition switch is turned ON (engine is not running) when the rear passenger's lap/shoulder belt is not fastened, the corresponding seat belt warning light will illuminate until the belt is fastened.

And then, the rear corresponding seat belt warning light will illuminate for approximately 35 seconds, if any of following occurs;

- You start the engine when the rear belt is not fastened.
- You drive over 9km/h when the rear belt is not fastened.
- The rear belt is disconnected when driving under 20km/h.

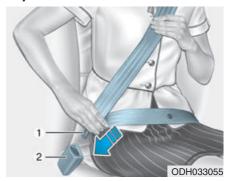
If the rear seat belt is fastened, the warning light will turn off immediately.

If the rear seat belt is disconnected when you drive over the 20km/h, the corresponding seat belt warning light will blink and warning chime will sound for 35 seconds.

But, if the rear passenger's lap/shoulder belt is/are connected and disconnected twice within 9 seconds after the belt is fastened, the corresponding seat belt warning light will not operate.

## Seat belt restraint system

#### Lap/shoulder belt



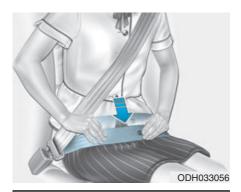
#### To fasten your seat belt:

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.

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.

(Continued)

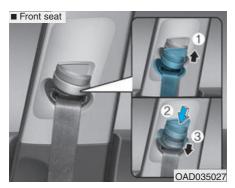
#### (Continued)

- 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

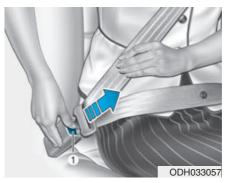
You can adjust the height of the shoulder belt anchor to one of the four different positions for maximum comfort and safety.

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:

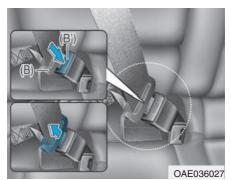
Press the release button (1) in the locking buckle.

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)



 Insert the tongue plate (A) into the buckle (A') until an audible "click" is heard, indicating the latch is locked. Make sure the belt is not twisted.



 Pull the tongue plate (B) and insert it into the buckle (B') until an audible "click" is heard, indicating the latch is locked. Make sure the belt is not twisted.

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

## Information

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

# Pre-tensioner seat belt (if equipped)



Your vehicle is equipped with driver's and front passenger's and rear passenger's (if equipped) Pre-tensioner Seat Belts (Retractor Pretensioner). The purpose of the pre-tensioner is to make sure the seat belts fit tightly against the occupant's body in certain frontal collisions. The pre-tensioner seat belts may be activated in crashes where the frontal collision 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 collisions, the pre-tensioner will activate and pull the seat belt into tighter contact against the occupant's body.

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

### **A** WARNING

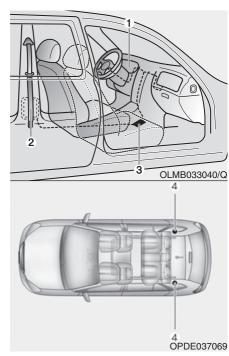
- Always wear your seat belt and sit properly in your seat.
- Do not use the seat belt if it is loose or twisted. A loose or twisted seat belt will not protect you properly in an accident.
- Do not place anything near the buckle. This may adversely affect the buckle and cause it to function improperly.
- 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.

### **A** 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.

## **A** CAUTION

Body work on the front area of the vehicle may damage the pre-tensioner seat belt system. Therefore, we recommend the system to be 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) Front retractor pre-tensioner
- (3) SRS control module
- (4) Rear retractor pre-tensioner (if equipped)

### 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 panel will illuminate for approximately 6 seconds after the ignition switch 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 control module is not malfunctioning. If the warning light does not illuminate when the vehicle is turned ON, stavs illuminated or illuminates when the vehicle is being driven, we recommend the pretensioner seat belts and/or SRS air bags be inspected by an authorized HYUNDAI dealer as soon as possible.

### Information

- Both the driver's and front passenger's pre-tensioner seat belts may be activated in certain frontal or side collisions.
- The pre-tensioners will be activated even if the seat belts are not worn at the time of the collision.
- When the pre-tensioner seat belts are activated, a loud noise may be heard and fine dust, which may appear to be smoke, may be visible in the passenger compartment. These are normal operating conditions and are not hazardous.
- Although it is non-toxic, the fine dust may cause skin irritation and should not be inhaled for prolonged periods. Wash all exposed skin areas thoroughly after an accident in which the pre-tensioner seat belts were activated.

#### Additional seat belt safety precautions

### Seat belt use during pregnancy

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

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

### **A** WARNING

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

Most countries have Child Restraint System laws which require children to travel in approved Child Restraint System devices, including booster seats. The age at which seat belts can be used instead of Child Restraint System differs among countries, so you should be aware of the specific requirements in your country, and where you are travelling. Infant and Child Restraint System must be properly placed and installed in a rear seat. For more information refer to the "Child Restraint Systems" in this chapter.

### **A** WARNING

ALWAYS properly restrain infants and small children in a Child Restraint System appropriate for the child's height and weight.

To reduce the risk of serious injury or death to a child and other passengers, NEVER hold a child in your lap or arms when the vehicle is moving. The violent forces created during an accident will tear the child from your arms and throw the child against the interior of the vehicle.

Small children are best protected from injury in an accident when properly restrained in the rear seat by a Child Restraint System that meets the requirements of the Safety Standards of your country. Before buying any Child Restraint System, make sure that it has a label certifying that it meets Safety Standard of your country. The Child Restraint System must be appropriate for your child's height and weight. Check the label on the Child Restraint System for this information. Refer to "Child Restraint Systems" 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 system (seat belts and/or air bags) is 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.

### **▲** 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, properly belted, and with the seatbacks upright.

#### Care of seat belts

Seat belt systems should never be disassembled or modified. In addition, care should be taken to assure that seat belts and belt hardware are not damaged by seat hinges, doors or other abuse.

### Periodic inspection

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

### 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. We recommend that you consult an authorized HYUNDAI dealer.

### CHILD RESTRAINT SYSTEM (CRS)

Our recommendation: Children always in the rear

### **A** WARNING

Always properly restrain children in the vehicle. Children of all ages are safer when riding in the rear seats. Never place a rearward-facing Child Restraint System on the front passenger seat, unless the air bag is deactivated.

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. Children too large for a Child Restraint System must use the seat belts provided.

Most countries have regulations 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 countries, so you should be aware of the specific requirements in your country, and where you are travelling.

Child Restraint Systems must be properly installed in the vehicle seat. Always use a commercially available Child Restraint System that meets the requirements of your country.

### 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.

### **A** WARNING

- Always follow the Child Restraint System manufacturer's instructions for installation and use.
- Always properly restrain your child in the Child Restraint System.
- 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, we recommend a HYUNDAI dealer to check the Child Restraint System, seat belts, ISOFIX anchorages and top-tether anchorages.

## Selecting a Child Restraint System (CRS)

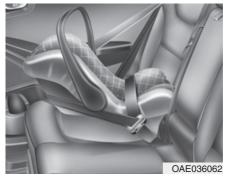
When selecting a Child Restraint System for your child, always:

- Make sure the Child Restraint System has a label certifying that it meets applicable Safety Standards of your country.
  - A Child Restraint System may only be installed if it was approved in accordance with the requirements of ECE-R44 or ECE-R129.
- 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. There are different types of rearward-facing Child Restraint Systems: infant-only Child Restraint Systems can only be used rearward-facing. 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.



**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)

### **A** 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.

### **A** WARNING

If the vehicle headrest prevents proper installation of a Child Restraint System, the headrest 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 belt or with the ISOFIX top-tether and/or ISOFIX anchorage and/or with the support leq.
- 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-toside 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 confortable 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.

## **A** 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.

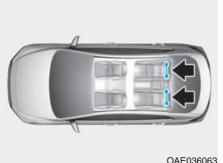
### ISOFIX anchorage and top-tether anchorage (ISOFIX anchorage system) for children

The ISOFIX 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 ISOFIX system uses anchors in the vehicle and attachments on the Child Restraint System. The ISOFIX system eliminates the need to use seat belts to secure the Child Restraint System to the rear seats.

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

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

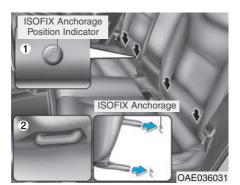
The Child Restraint System manufacturer will provide you with instructions on how to use the Child Restraint System with its attachments for the ISOFIX anchorages.



ISOFIX anchorages have been provided in the left and right outboard rear seating positions. Their locations are shown in the illustration.

### **A** WARNING

Do not attempt to install a Child Restraint System using ISOFIX anchorages in the rear center seating position. There are no ISOFIX anchorages provided for this seat. Using the outboard seat anchorages, for the CRS installation on the rear center seating position, can damage the anchorages.



(1): ISOFIX Anchor Position Indicator (Type A- (a), Type B- (b))

(2): ISOFIX Anchor

ISOFIX anchorages are located between the seatback and the seat cushion of the rear seat left and right outboard seating positions, indicated by the symbols.

### Securing a Child Restraint System with the "ISOFIX Anchorage System"

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

- 1. Move the seat belt buckle away from the ISOFIX anchorages.
- Move any other objects away from the anchorages that could prevent a secure connection between the Child Restraint System and the ISOFIX anchorages.
- Place the Child Restraint System on the vehicle seat, then attach the seat to the ISOFIX anchorages 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 ISOFIX attachments on the Child Restraint System to the ISOFIX anchorages.

### A WARNING

Take the following precautions when using the ISOFIX 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 ISOFIX system inspected by your dealer after an accident. An accident can damage the ISOFIX system and may not properly secure the Child Restraint System.

### Securing a Child Restraint System seat with "Top-tether Anchorage" system



Top-tether anchorages for Child Restraint Systems are located on the rear of the seatbacks.



- Route the Child Restraint System top-tether strap over the seatback. Placing the top tether strap, please follow the instructions of the Child Restraint System manufacturer.
- Connect the top-tether strap to the top-tether anchorage, 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.

### **A** WARNING

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 ISOFIX top-tether anchorage. This could cause the anchorage or attachment to come loose or break.
- Do not attach the top-tether to anything other than the correct top-tether anchorage. It may not work properly if attached to something else.
- Child Restraint System anchorages are designed to withstand only those loads imposed by correctly fitted Child Restraint System.

Under no circumstances are they to be used for adult seat belts or harnesses or for attaching other items or equipment to the vehicle.

### Suitability of each seating position for ISOFIX Child Restraint Systems according to ECE regulations

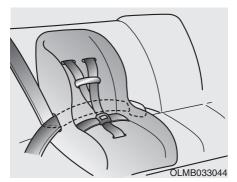
| Mass Group      | Size Class | Fixture | Vehicle ISOFIX Positions |                         |                          |             |  |
|-----------------|------------|---------|--------------------------|-------------------------|--------------------------|-------------|--|
|                 |            |         | Front Passenger          | Rear Outboard<br>(Left) | Rear Outboard<br>(Right) | Rear Center |  |
| Carrycot        | F          | ISO/L1  | -                        | Х                       | Х                        | -           |  |
|                 | G          | ISO/L2  | -                        | Х                       | X                        | -           |  |
| 0 : UP to 10kg  | E          | ISO/R1  | -                        | IL                      | IL                       | -           |  |
| 0+ : UP to 13kg | E          | ISO/R1  | -                        | IL                      | IL                       | -           |  |
|                 | D          | ISO/R2  | -                        | IL                      | IL                       | -           |  |
|                 | С          | ISO/R3  | -                        | IL                      | IL                       | -           |  |
| I : 9 to 18kg   | D          | ISO/R2  | -                        | IL                      | IL                       | -           |  |
|                 | С          | ISO/R3  | -                        | IL                      | IL                       | -           |  |
|                 | В          | ISO/F2  | -                        | IUF + IL                | IUF + IL                 | -           |  |
|                 | B1         | ISO/F2X | -                        | IUF + IL                | IUF + IL                 | -           |  |
|                 | Α          | ISO/F3  | -                        | IUF + IL                | IUF + IL                 | -           |  |

- IUF = Suitable for ISOFIX Forward-Facing Child Restraint Systems of universal category approved for use in the mass group.
- IL = Suitable for particular ISOFIX Child Restraint Systems given in the attached list. These ISOFIX CRS are those of the "specific vehicle", "restricted" or "semi-universal" categories.
- X = ISOFIX position not suitable for ISOFIX Child Restraint System in this mass group and/or this size class.
- \* Both ISO/R2 and ISO/R3 are able to be set up only at the foremost position of the passenger seat.
- \* ISOFIX Child Restraint System size classes and fixtures

- A ISO/F3: Full-Height Forward-Facing toddler Child Restraint System (height 720mm)
- B ISO/F2: Reduced-Height Forward-Facing toddler Child Restraint System (height 650mm)
- B1 ISO/F2X: Reduced-Height Second Version Back Surface Shape Forward-Facing toddler Child Restraint System (height 650mm)
- C ISO/R3: Full-Size Rearward-Facing toddler Child Restraint System
- D ISO/R2: Reduced-Size Rearward-Facing toddler Child Restraint System
- E ISO/R1: Infant-Size Rearward-Facing Child Restraint System
- F ISO/L1: Left Lateral Facing position Child Restraint System (carry-cot)
- G ISO/L2: Right Lateral Facing position Child Restraint System (carry-cot)

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

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



Installing a Child Restraint System with a lap/shoulder belt

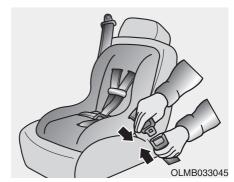
To install a Child Restraint System on the rear seats, do the following:

 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.

## *i* Information

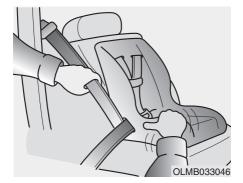
When using the rear center seat belt, you should also refer to the "3-point Rear Center Seat Belt" in this chapter.



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

### Information

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



- 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.
- 4. Push and pull on the Child Restraint System to confirm that the seat belt is holding it firmly in place.

If your Child Restraint System manufacturer recommends the use of a top-tether with the lap/shoulder belt, see page 2-44.

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.

## Suitability of each seating position for "universal" category belted Child Restraint Systems according to ECE regulations (for Europe)

| Mass Group                  |            | Seating Position  |                        |               |                            |                   |  |  |
|-----------------------------|------------|-------------------|------------------------|---------------|----------------------------|-------------------|--|--|
|                             |            | Front Passenger   |                        | Second Row    |                            |                   |  |  |
|                             |            | Air bag activated | Air bag<br>deactivated | Outboard Left | Center (3-point seat belt) | Outboard<br>Right |  |  |
| Group 0<br>(0-9months)      | up to 10kg | Х                 | U*                     | U             | U                          | U                 |  |  |
| Group 0 +<br>(0-2years)     | up to 13kg | Х                 | U*                     | U             | U                          | U                 |  |  |
| Group I<br>(9months-4years) | 9 to 18kg  | Х                 | U*                     | U             | U                          | U                 |  |  |
| Group II<br>(15 to 25kg)    | 15 to 25kg | UF                | U*                     | U             | U                          | U                 |  |  |
| Group III<br>(22 to 36kg)   | 22 to 36kg | UF                | U*                     | U             | U                          | U                 |  |  |

- U = Suitable for "universal" category Child Restraint Systems approved for use in this mass group.
- U\* = Suitable for "universal" category Child Restraint Systems approved for use in this mass group (If front passenger seat is not adjustable for the height, you should adjust the seat to upward properly. (This step is necessary to restrain child seat to your vehicle.)
  - ₩ Height adjutable device of Front passenger seat is an optional feature.
- UF = Suitable for forward facing "universal" category restraints approved for use in this mass group.
- L = Suitable for particular child restraints given on attached list. These restraints may be of the "specific vehicle", "restricted" or "semi-universal" categories.
- B = Built-in restraint approved for this mass group.
- X = Seat position not suitable for children in this mass group.

# Suitability of each seating position for "universal" category belted Child Restraint Systems (except Europe)

| Mass Group                  |            | Seating Position    |                         |                  |                       |                       |                   |  |
|-----------------------------|------------|---------------------|-------------------------|------------------|-----------------------|-----------------------|-------------------|--|
|                             |            | Front Passenger     |                         | Second Row       |                       |                       |                   |  |
|                             |            | Air bag<br>Equipped | Air bag NOT<br>Equipped | Outboard<br>Left | Center (3-point belt) | Center (2-point belt) | Outboard<br>Right |  |
| Group 0<br>(0-9months)      | up to 10kg | Х                   | U*                      | U                | U                     | UF                    | U                 |  |
| Group 0 + (0-2years)        | up to 13kg | Х                   | U*                      | U                | U                     | UF                    | U                 |  |
| Group I<br>(9months-4years) | 9 to 18kg  | Х                   | U*                      | U                | U                     | UF                    | U                 |  |
| Group II<br>(15 to 25kg)    | 15 to 25kg | UF                  | U*                      | U                | U                     | UF                    | U                 |  |
| Group III<br>(22 to 36kg)   | 22 to 36kg | UF                  | U*                      | U                | U                     | UF                    | U                 |  |

- U = Suitable for "universal" category Child Restraint Systems approved for use in this mass group.
- U\* = Suitable for "universal" category Child Restraint Systems approved for use in this mass group (If front passenger seat is not adjustable for the height, you should adjust the seat to upward properly. (This step is necessary to restrain child seat to your vehicle.)
  - \* Height adjustable device of Front passenger seat is an optional feature.
- UF = Suitable for forward facing "universal" category restraints approved for use in this mass group.
- L = Suitable for particular child restraints given on attached list. These restraints may be of the "specific vehicle", "restricted" or "semi-universal" categories.
- B = Built-in restraint approved for this mass group.
- X = Seat position not suitable for children in this mass group.

### i-Size Child Restraint Systems according to ECE regulations (for Europe)

|                                | Seating Position            |               |        |                   |  |  |
|--------------------------------|-----------------------------|---------------|--------|-------------------|--|--|
| Mass Group                     | F                           | Second Row    |        |                   |  |  |
| wass Gloup                     | Front passenger<br>Outboard | Outboard Left | Center | Outboard<br>Right |  |  |
| i-size Child Restraint Systems | Х                           | i-U           | Х      | i-U               |  |  |

i-U : Suitable for i-Size "universal" Child Restraint Systems forward and rearward-facing

i-UF: Suitable for forward-facing i-Size "universal" Child Restraint Systems only

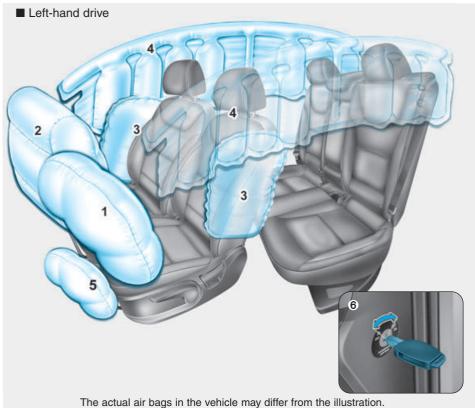
X : Seat position not suitable for i-size CRS.

### Recommended child restraint systems (for Europe)

| Mass Group | Name                  | Manufacturer | Type of Fixation                            | ECE-R44<br>Approval No. |
|------------|-----------------------|--------------|---|-------------------------|
| Group 0+   | Cabriofix & Familyfix | Maxi Cosi    | Rearward-facing with ISOFIX                 | E4 04443907             |
| Group I    | Duo Plus              | Britax Römer | Forward-facing with ISOFIX and top-tether   | E1 04301133             |
| Group II   | KidFix II XP          | Britax Römer | Forward-facing with ISOFIX and vehicle Belt | E1 04301323             |
| Group III  | KidFix II XP          | Britax Römer | Forward-facing with ISOFIX and vehicle Belt | E1 04301323             |

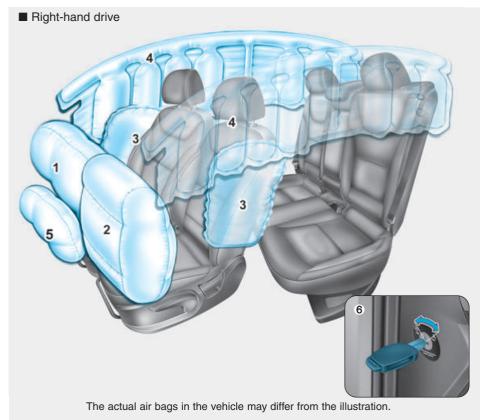
CRS Manufacturer information
Maxi Cosi Cabriofix & Familyfix http://www.maxi-cosi.com
Britax Römmer http://www.britax.com

### 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\*
- 5. Knee air bag\*
- Front passenger air bag ON/OFF switch\*
- \* : if equipped

OAE036035/OAE036073L



- 1. Driver's front air bag\*
- 2. Passenger's front air bag\*
- 3. Side air bag\*
- 4. Curtain air bag\*
- 5. Knee air bag\*
- Front passenger air bag ON/OFF switch\*
- \*: if equipped

OAE036035R/OAE036073R

The vehicles are 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.

### **A** WARNING

#### AIR BAG SAFETY PRECAUTIONS

ALWAYS use seat belts 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 engine 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.

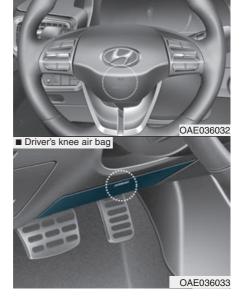
You and your passengers should never sit or lean unnecessarily close to the air bags or lean against the door or center console.

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

### Where are the air bags?

■ Driver's front air bag

Driver's and passenger's front air bags (if equipped)





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 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 in case of a frontal impact of sufficient severity.

### **A** WARNING

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.

(Continued)

#### (Continued)

- 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, perfume 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.



Passenger's front air bag ON/OFF switch (if equipped)

The purpose of the switch is to disable the passenger's front air bag in order to transport occupants who are at increased risk for air bag-related injury due to age, size, or medical condition.



To deactivate the passenger's front air bag:

Insert the key or a similar rigid device into the passenger's front air bag ON/OFF switch and turn it to the OFF position. The passenger air bag OFF indicator (※2) will illuminate and stay on until the passenger's front air bag is reactivated.



To reactivate the passenger's front air bag:

Insert the key or a similar rigid device into the passenger's front air bag ON/OFF switch and turn it to the ON position. The passenger air bag ON indicator ((a)) will illuminate and stay on for 60 seconds.

## **i** Information

The passenger's front air bag ON/OFF indicator illuminates for about 4 seconds after the ignition switch is placed in the ON position.

### **A** WARNING

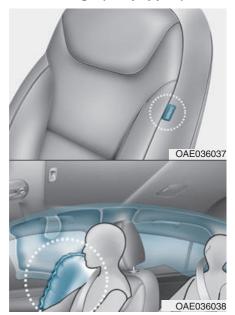
Never allow an adult passenger to ride in the front passenger seat when the passenger air bag OFF indicator is illuminated. During a collision, the air bag will not inflate if the indicator is illuminated. Turn on the passenger's front air bag or have your passenger move to the rear seat.

### **A** WARNING

If the passenger's front air bag ON/OFF switch malfunctions, the following conditions may occur:

- The air bag warning light ( \*) on the instrument panel will illuminate.
- The passenger air bag OFF indicator (※) will not illuminate and the ON indicator (※) will come on and go off after approximately 60 seconds. The passenger's front air bag will inflate in a frontal impact even though the passenger's front air bag ON/OFF switch is set to the OFF position.
- We recommend that an authorized HYUNDAI dealer inspect the passenger's front air bag ON/OFF switch and the SRS air bag system as soon as possible.

### 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 are designed to deploy during certain side impact collisions, depending on the crash severity, angle, speed and point of impact.

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

### **A** WARNING

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

- Seat belts must be worn at all times to help keep occupants positioned properly.
- Do not allow passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and seats.

(Continued)

### (Continued)

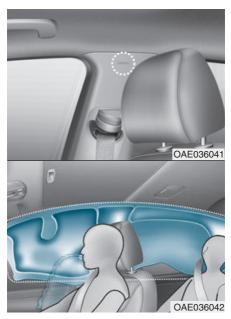
- Hold the steering wheel at the 9 o'clock and 3 o'clock positions, to minimize the risk of injuries to your hands and arms.
- Do not use any accessory seat covers. This could reduce or prevent the effectiveness of the system.
- Do not hang other objects except clothes. In an accident it may cause vehicle 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.

(Continued)

#### (Continued)

- Do not install any accessories on the side or near the side air bags.
- Do not put any objects between the side air bag label and seat cushion. It could cause harm if the vehicle is in a crash severe enough to cause the air bags to deploy.
- Do not cause impact to the doors when the ignition switch is in the ON position or this may cause the side air bags to inflate.
- If the seat or seat cover is damaged, we recommend that the system be serviced by an authorized HYUNDAI dealer.

### Curtain air bags (if equipped)



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, angle, speed and impact.

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

### **A** WARNING

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

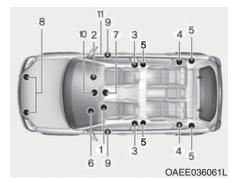
- All seat occupants must wear seat belts at all times to help keep occupants positioned properly.
- Properly secure Child Restraint System as far away from the door as possible.

(Continued)

#### (Continued)

- Do not place any objects over the air bag. Also, do not attach any objects around the area the air bag inflates such as the door, side door glass, front and rear pillar, roof side rail.
- Do not hang other objects except clothes, especially hard or breakable objects. In an accident, it may cause vehicle damage or personal injury.
- Do not allow passengers to lean their heads or bodies onto doors, put their arms on the doors, stretch their arms out of the window, or place objects between the doors and seats.
- Do not open or repair the side curtain air bags.

# How does the air bags system operate?



The SRS consists of the following components:

- (1) Driver's front air bag module/ Driver's knee air bag module
- (2) Passenger's front air bag module
- (3) Side air bag modules/ Side impact sensors
- (4) Curtain air bag modules
- (5) Front retractor pre-tensioner/ Rear retractor pre-tensioner assemblies (if equipped)
- (6) Air bag warning light
- (7) SRS control module (SRSCM)

- (8) Front impact sensors
- (9) Side pressure sensors
- (10) Passenger's front air bag ON/OFF indicator (front passenger's seat only)
- (11) Passenger's front air bag ON/OFF switch

The SRSCM 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 (Supplement Restraint System) air bag warning light on the instrument panel displays the air bag symbol depicted in the illustration. The system checks the air bag electrical system for malfunctions. The light indicates that there is a potential problem with your air bag system.

### **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 six seconds when the ignition switch is in the ON position.
- The light stays on after illuminating for approximately six seconds.
- The light comes on while the vehicle is in motion.
- The light blinks when the engine is running.

We recommend that 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 by supporting the side upper body area.

- Air bags are activated (able to inflate if necessary) only when the ignition switch 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.

- Air bag deployment depends on a number of factors including vehicle speed, angles of impact and the density and stiffness of the vehicles or objects which your vehicle impacts during a collision. The determining factors are not limited to those mentioned above.
- The front 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.
- 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 space to inflate. It is recommended that drivers sit as far as possible between the center of the steering wheel and the chest while still maintaining control of the vehicle.

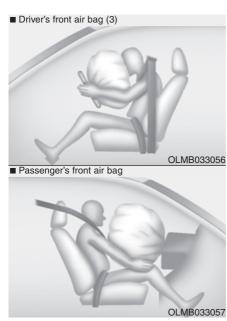


When the SRSCM detects a sufficiently severe impact to the front of the vehicle, it will automatically deploy the front air bags.



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.

### **A** WARNING

To prevent objects from becoming dangerous projectiles when the passenger's air bag inflates:

- Do not install or place any objects (drink holder, CD holder, stickers, etc.) on the front passenger's panel above the glove box where the passenger's air bag is located.
- Do not install a container of liquid air freshener near the instrument cluster or on the instrument panel surface.

## What to expect after an air bag inflates

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

### **A** 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.
- We recommend that an authorized HYUNDAI dealer replace the air bag immediately after deployment. Air bags are designed to be used only once.

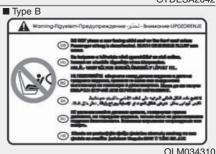
# Noise and smoke from inflating air bag

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.

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





Never install a Child Restraint System in the front passenger seat, unless the air bag is deactivated

### **A** WARNING

NEVER use a rearward facing Child Restraint on a seat protected by an ACTIVE AIR BAG 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

### **A** WARNING

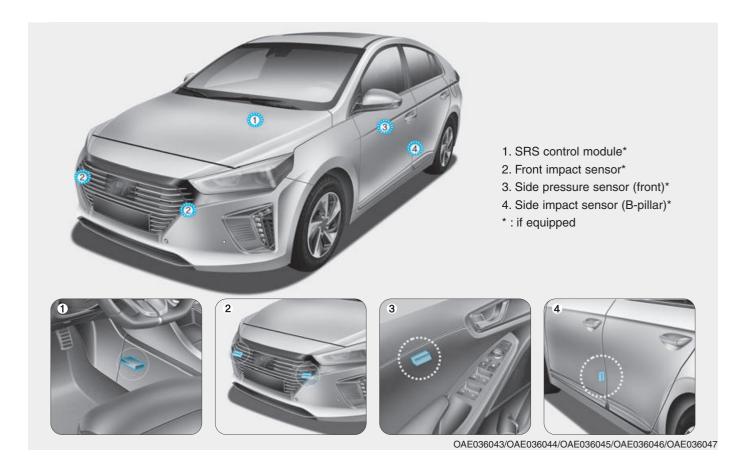
To reduce the risk of an air bag deploying unexpectedly and causing serious injury or death:

- Do not hit or allow any objects to impact the locations where air bags or sensors are installed.
- Do not perform maintenance on or around the air bag sensors. If the location or angle of the sensors is altered, the air bags may deploy when they should not or may not deploy when they should.
- Do not install bumper guards or replace the bumper with a nongenuine part. This may adversely affect the collision and air bag deployment performance.

(Continued)

### (Continued)

- Place the ignition switch to the LOCK/OFF or ACC position, when the vehicle is being towed to prevent inadvertent air bag deployment.
- We recommend that all air bag repairs are conducted by an authorized HYUNDAI dealer.

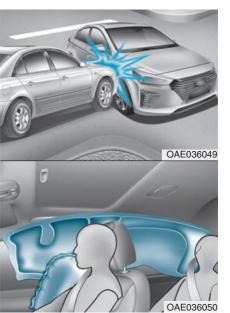


#### Air bag inflation conditions



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.

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.

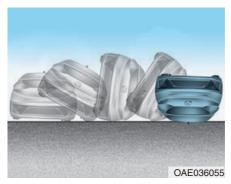
However, side and curtain air bags may inflate depending on the severity, vehicle speed and angles of impact.



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.



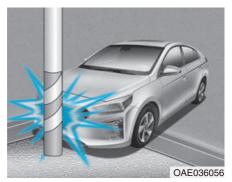
Just before impact, drivers often brake heavily. Such heavy braking lowers the front portion of the vehicle causing it to "ride" under a vehicle with a higher ground clearance. Air bags may not inflate in this "underride" situation because deceleration forces that are detected by sensors may be significantly 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

The side and/or curtain air bags may inflate when the vehicle is rolled over by a side impact collision, if the vehicle is equipped with side and/or curtain air bags.



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 maintenancefree and there are no parts you can safely service by yourself. If the SRS air bag warning light does not illuminate when the ignition switch is in the ON position, or continuously remains on, we recommend that the system be 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.

## **A** 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.
- We recommend that inflated air bags be replaced by an authorized HYUNDAI dealer.

(Continued)

#### (Continued)

 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.

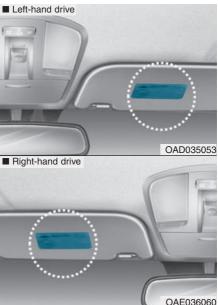
Do not place items under the front seats. Placing items under the front seats could interfere with the operation of the supplemental restraint system sensing components and wiring harnesses.

**Do not cause impact to the doors.** Impact to the doors when the ignition switch is in the ON position may cause the air bags to inflate.

# 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 are attached to alert the 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 Owner's Manual.

# Convenient features of your vehicle

| Accessing your vehicle                        | 3-4  |
|---|------|
| Remote key                                    | 3-4  |
| Smart key                                     | 3-7  |
| Immobilizer system                            |      |
| Door locks                                    | 3-12 |
| Operating door locks from outside the vehicle |      |
| Operating door locks from inside the vehicle  | 3-14 |
| Auto door lock/unlock features                | 3-16 |
| Child-protector rear door locks               | 3-16 |
| Theft-alarm system                            | 3-17 |
| Driver position memory system                 |      |
| Storing memory positions                      |      |
| Recalling memory positions                    |      |
| Easy access function                          |      |
| Steering wheel                                | 3-20 |
| Electric power steering (EPS)                 |      |
| Tilt steering / Telescopic steering           |      |
| Heated steering wheel                         |      |
| Horn  | 3-22 |
| Mirrors                                       | 3-22 |
| Inside rearview mirror                        | 3-22 |
| Outside rearview mirror                       |      |

| Windows                                   | 3-27 |
|---|------|
| Power windows                             | 3-27 |
| Sunroof                                   | 3-32 |
| Sunroof opening and closing               |      |
| Sliding the sunroof                       |      |
| Tilting the sunroof                       |      |
| Sunshade                                  |      |
| Resetting the sunroof                     | 3-35 |
| Exterior features                         |      |
| Hood                                      |      |
| Tailgate                                  |      |
| Fuel filler door (Hybrid vehicle)         |      |
| Fuel filler door (Plug-in hybrid vehicle) | 3-42 |
| Instrument cluster                        | 3-45 |
| Instrument cluster control                | 3-47 |
| Gauges and meters                         | 3-47 |
| Warning and indicator lights              |      |
| LCD display messages                      |      |
| LCD display                               |      |
| LCD display control                       |      |
| LCD display modes (for cluster type A)    |      |
| LCD display modes (for cluster type B)    |      |

| Trip computer (hybrid vehicle)         | 3-96  |
|--|-------|
| Trip computer (plug-in hybrid vehicle) | 3-101 |
| Light                                  | 3-107 |
| Exterior lights                        |       |
| Welcome system                         |       |
| Interior lights                        | 3-114 |
| Wipers and washers                     | 3-117 |
| Windshield wipers                      |       |
| Windshield washers                     |       |
| Driver assist system                   | 3-120 |
| Rear view camera                       | 3-120 |
| Rear parking assist system             | 3-121 |
| Parking assist system                  | 3-124 |
| Automatic climate control system       | 3-127 |
| Automatic heating and air conditioning | 3-128 |
| Manual heating and air conditioning    | 3-129 |
| System operation                       | 3-135 |
| System maintenance                     | 3-138 |

| Windshield defrosting and defogging | 3-140 |
|-------------------------------------|-------|
| Automatic climate control system    | 3-140 |
| Defogging logic                     | 3-141 |
| Auto defogging system               | 3-141 |
| Defroster                           | 3-142 |
| Climate control additional features | 3-144 |
| Automatic ventilation               | 3-144 |
| Clean air                           | 3-144 |
| Sunroof inside air recirculation    | 3-144 |
| Storage compartment                 | 3-145 |
| Center console storage              |       |
| Glove box                           |       |
| Sunglass holder                     | 3-146 |
| Multi box                           | 3-146 |

| Interior features                       | 3-147 |
|---|-------|
| Ashtray                                 | 3-147 |
| Cup holder                              | 3-147 |
| Sunvisor                                | 3-148 |
| Power outlet                            | 3-149 |
| Wireless cellular phone charging system | 3-150 |
| Cigarette lighter                       | 3-152 |
| Clock                                   | 3-152 |
| Clothes hanger                          | 3-153 |
| Floor mat anchor(s)                     |       |
| Luggage net (holder)                    | 3-154 |

# ACCESSING YOUR VEHICLE Remote key (if equipped)



Your HYUNDAI uses a remote key, which you can use to lock or unlock a door (and tailgate) and even start the engine.

- 1. Door Lock
- 2. Door Unlock
- 3. Tailgate Unlock

### Locking

To lock:

- 1. Close all doors, engine hood and tailgate.
- 2. Press the Door Lock button (1) on the remote key.
- The doors will lock. The hazard warning lights will blink. Also, the outside rearview mirror will fold, if the outside rearview mirror folding switch is in the AUTO position (if equipped).
- Make sure the doors are locked by checking the position of the door lock button inside the vehicle.

### **A** WARNING

Do not leave the keys in your vehicle with unsupervised children. Unattended children could place the key in the ignition switch and may operate power windows or other controls, or even make the vehicle move, which could result in serious injury or death.

### Unlocking

To unlock:

- 1. Press the Door Unlock button (2) on the remote key.
- 2. The doors will unlock. The hazard warning lights will blink two times. Also, the outside rearview mirror will unfold, if the outside rearview mirror folding switch is in the AUTO position (if equipped).

## *i* Information

After unlocking the doors, the doors will lock automatically after 30 seconds unless a door is opened.

#### Tailgate unlocking

To unlock:

- Press the Tailgate Unlock button

   on the remote key for more than one second.
- 2. The hazard warning lights will blink two times. Once the tailgate is opened and then closed, the tailgate will lock automatically.

## Information

- After unlocking the tailgate, the tailgate will lock automatically.
- The word "HOLD" is written on the button to inform you that you must press and hold the button for more than one second.

## Start-up

For detailed information refer to "Key Ignition Switch" in chapter 5.

#### NOTICE

To prevent damaging the remote key:

- Keep the remote key away from water or any liquid and fire. If the inside of the remote 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 remote key.
- Protect the remote key from extreme temperatures.

### Mechanical key



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

To unfold the key, press the release button then the key will unfold automatically.

To fold the key, fold the key manually while pressing the release button.

#### NOTICE

Do not fold the key without pressing the release button. This may damage the key.

#### Remote key precautions

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

- The key is in the ignition switch.
- You exceed the operating distance limit (about 30 m [90 feet]).
- The remote key battery is weak.
- Other vehicles or objects may be blocking the signal.
- The weather is extremely cold.
- The remote key is close to a radio transmitter such as a radio station or an airport which can interfere with normal operation of the remote key.

When the remote key does not work correctly, open and close the door with the mechanical key. If you have a problem with the remote key, it is recommended that you contact an authorized HYUNDAI dealer.

If the remote key is in close proximity to your mobile phone, the signal could be blocked by your mobile phone's normal operational signals.

This is especially important when the phone is active such as making and receiving calls, text messaging, and/or sending/receiving emails.

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

## 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.

#### NOTICE

Keep the remote key away from electromagnetic materials that block electromagnetic waves to the key surface.

#### Battery replacement

If the remote key is not working properly, try replacing the battery with a new one.



Battery Type: CR2032 To replace the battery:

- 1. Insert a slim tool into the slot and gently pry open the cover.
- Remove the old battery and insert the new battery. Make sure the battery position is correct.
- 3. Reinstall the rear cover of the remote key.

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

## 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.

## Smart key (if equipped)



Your HYUNDAI uses a Smart Key, which you can use to lock or unlock a door (and tailgate) and even start the engine.

- 1. Door Lock
- 2. Door Unlock
- 3. Tailgate Unlock

## Locking



#### To lock:

- 1. Close all doors, engine hood and tailgate.
- 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. Also, the outside rearview mirror will fold, if the outside rearview mirror folding switch is in the AUTO position (if equipped).
- Make sure the doors are locked by checking the position of the door lock button inside the vehicle.

## Information

The door handle button will only operate when the smart key is within  $0.7\sim1$  m (28 $\sim40$  in.) from the outside door handle.

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 Engine Start/Stop button is in ACC or ON position.
- Any door except the tailgate is open.

#### **A** WARNING

Do not leave the Smart Key in your vehicle with unsupervised children. Unattended children could press the Engine 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



#### To unlock:

- 1. Carry the Smart Key.
- 2. Either press the door handle button or press the Door Unlock button (2) on the smart key.
- The doors will unlock. The hazard warning lights will blink two times. Also, the outside rearview mirror will unfold, if the outside rearview mirror folding switch is in the AUTO position. (if equipped)

## *i* Information

- The door handle button will only operate when the smart key is within 0.7~1 m (28~40 in.) from the outside door handle. Other people can also open the doors without the smart key in possession.
- After unlocking the doors, the doors will lock automatically after 30 seconds unless a door is opened.

### Tailgate unlocking

To unlock:

- 1. Carry the smart key.
- Either press the tailgate handle button or press the Tailgate Unlock button (3) on the smart key for more than one second.
- 3. The hazard warning lights will blink two times.

Once the tailgate is opened and then closed, the tailgate will lock automatically.

# Information

After unlocking the tailgate, the tailgate will lock automatically after 30 seconds unless the tailgate is opened.

#### Start-up

You can start the engine without inserting the key. For detailed information refer to the Engine 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.

### 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.

### Mechanical key

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



Press and hold the release button (1) and 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.

When 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 phones normal operational signals. This is especially important 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.

## 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.

#### NOTICE

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

#### 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.
- 3. Remove the old battery and insert the new battery. Make sure the battery position is correct.
- 4. Reinstall the rear cover of the smart key.

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

## 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 (if equipped)

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

When the ignition switch 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 ignition switch to the LOCK/OFF position, then place the ignition switch to the ON position again.

The system may not recognize your key's coding if another immobilizer key or other metal object (i.e., key chain) is near the key. The engine 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.

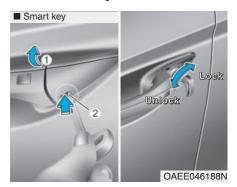
#### NOTICE

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.

#### **DOOR LOCKS**

# Operating door locks from outside the vehicle

#### Mechanical key



#### **Smart key**

To remove the cover:

- 1. Pull out the door handle (1).
- Press the lock (2) located inside the bottom part of the cover with a key or flat-head screwdriver.
- 3. Push out the cover while pressing the lock.

To install the cover:

- 1. Pull out the door handle.
- 2. Install the cover.

#### Remote key and smart key

After removing the cover, turn the key toward the front of the vehicle to unlock and toward the rear of the vehicle to lock.

If you lock/unlock the driver's door with a key, all vehicle doors 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.

### Remote key



To lock the doors, press the Door Lock button (1) on the remote key.

To unlock the doors, press the Door Unlock button (2) on the remote 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.

## 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.

### 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.

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

- If the inner door handle of the driver's (or front passenger's) door is pulled when the door lock button is in the lock position, the button is unlocked and door opens.
- Front doors cannot be locked if the key is in the ignition switch and any front door is open (if equipped with remote key).
- Doors cannot be locked if the smart key is in the vehicle and any door is open (if equipped with smart key).

## 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 central door lock switch



When pressing the  $(\mathbf{G})$  portion (1) of the switch, all vehicle doors will lock.

- If the key is in the ignition switch and any door is opened, the doors will not lock even though the lock button (1) 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 (1) of the central door lock switch is pressed.

When pressing the (1) portion (2) of the switch, all vehicle doors will unlock.

### **A** 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 driver's or passenger's door while the vehicle is moving.

#### **A** WARNING

Do not leave children or animals unattended in your vehicle. An enclosed vehicle can become extremely hot, causing death or serious injury to unattended children or animals who cannot escape 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.

#### **A** WARNING

Always secure your vehicle

Leaving your vehicle unlocked can allow theft or entry into the 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 ignition switch in the LOCK/OFF position, close all windows, lock all doors, and always take the key with you.

#### A 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.

#### A WARNING

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.

#### 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 15 km/h (9 mph).

You can activate or deactivate the Auto Door Lock/Unlock features from the User Settings Mode on the LCD display. For more information, 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 key (or screwdriver) (1) into the hole and turn it to the lock position.

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

#### **A** WARNING

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

#### THEFT-ALARM SYSTEM

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

- A door is opened without using the remote key or smart key.
- The tailgate is opened without using the remote key or smart key.
- The engine hood is opened.

The alarm continues for 30 seconds, then the system resets. To turn off the alarm, unlock the doors with the remote key or smart key.

The Theft Alarm System automatically sets 30 seconds after you lock the doors and the tailgate. For the system to activate, you must lock the doors and the tailgate from outside the vehicle with the remote key or 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 once to indicate the system is armed.

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

The Theft Alarm System will not set if the hood, the tailgate, or any door is not fully closed. If the system will not set, check the hood, the tailgate, 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 remote key or smart key, open the doors by using the mechanical key and place the ignition switch in the ON position (for remote key) or start the engine (for smart key) and wait for 30 seconds.
- When the system is disarmed but a door or tailgate is not opened within 30 seconds, the system will be rearmed.

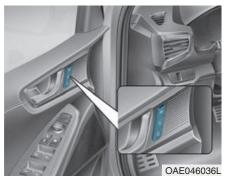


## **i** Information

Vehicles equipped with a theft alarm system will have a label attached to the vehicle with the following words:

- 1. WARNING
- 2. SECURITY SYSTEM

## DRIVER POSITION MEMORY SYSTEM (IF EQUIPPED)



The Driver Position Memory System is provided to store and recall the following memory settings with a simple button operation.

- Driver's seat position
- Outside rearview mirror position
- Instrument panel illumination intensity

#### A WARNING

Never attempt to operate the driver position memory system while the vehicle is moving.

This could result in loss of control, and an accident causing death, serious injury, or property damage.

## *i* Information

- If the battery is disconnected, the memory settings will be erased.
- If the Driver Position Memory System does not operate normally, we recommend that you have the system checked by an authorized HYUNDAI dealer.

### **Storing memory positions**

- Move the shift lever into P while the ignition switch or the Engine Start/Stop button is in the ON position.
- Adjust the driver's seat position, outside rearview mirror position and instrument panel illumination intensity to the desired position.
- Press the SET button. The system will beep once and notify you "Press button to save settings"on the LCD display.
- Press one of the memory buttons (1 or 2) within 4 seconds. The system will beep twice when the memory has been successfully stored.
- 5. "Driver 1 (or 2) settings saved" will appear on the LCD display.

### **Recalling memory positions**

- Move the shift lever into P while the ignition switch or the Engine Start/Stop button is in the ON position.
- Press the desired memory button (1 or 2). The system will beep once, then the driver's seat position, outside rearview mirror and instrument panel illumination will automatically adjust to the stored position (if equipped).
- 3. "Driver 1(or 2) settings is applied" will appear on the LCD display.

## Information

- While recalling the "1" memory position, pressing the SET or 1 button temporarily stops the adjustment of the recalled memory position. Pressing the 2 button recalls the "2" memory position.
- While recalling the "2" memory position, pressing the SET or 2 button temporarily stops the adjustment of the recalled memory position. Pressing the 1 button recalls the "1" memory position.
- While recalling the stored positions, pressing one of the control buttons for the driver's seat, outside rearview mirror, or instrument panel illumination will cause the movement of that component to stop and move in the direction that the control button is pressed.

# Easy access function (if equipped)

The system will move the driver's seat automatically as follows:

The shift lever is in P

- Without smart key system
  - It will move the driver's seat rearward when the ignition key is removed and the driver's door is opened.
  - It will move the driver's seat forward when the ignition key is inserted.
- With smart key system
  - It will move the driver's seat rearward when the Engine Start/Stop button is in the OFF position and the driver's door is opened.
  - It will move the driver's seat forward when the vehicle is turned ON or the driver's door is closed with the smart key with you.

You can activate or deactivate the Easy Access Function from the User Settings Mode on the LCD display. For more information, refer to "LCD Display" in this chapter.

#### STEERING WHEEL

## **Electric power steering (EPS)**

The system assists you with steering the vehicle. If the engine 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, we recommend that the system be checked by an authorized HYUNDAI dealer.

#### NOTICE

 If the Electric 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 and have the system checked as soon as possible.

(Continued)

#### (Continued)

 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.

## *i* Information

The following symptoms may occur during normal vehicle operation:

• The steering effort may be high immediately after placing the ignition switch or the Engine Start/Stop button in the ON position.

This happens as the system performs the EPS system diagnostics. When the diagnostics are completed, the steering wheel will return to its normal condition.

(Continued)

#### (Continued)

- A click noise may be heard from the EPS relay after the ignition switch is placed in the ON or LOCK/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

## **A** 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.



Pull down the lock-release lever (1) on the steering wheel column and adjust the steering wheel angle (2) and position (3, if equipped). 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.

After adjusting, pull up the lock-release lever (1) to lock the steering wheel in place. Push the steering wheel both up and down to be certain it is locked in position. Always adjust the position of the steering wheel before driving.

# Heated steering wheel (if equipped)



When the ignition switch is in the ON position or when the engine is running, 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.

# Information

The heated steering wheel will turn off automatically approximately 30 minutes after the heated steering wheel is turned on.

When the engine is turned off during the engine and the heated steering wheel is on, the timer function of heated steering wheel will be reset.

To reuse heated steering wheel, press button again.

#### 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.

#### **A** WARNING

Make sure your line of sight is not obstructed. Do not place objects in the rear seat, cargo area, or behind the rear headrests which could interfere with your vision through the rear window.

### **A** 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.

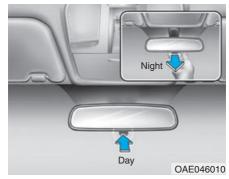
## **A WARNING**

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)



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 headlamps of the vehicles behind you during night driving.

Remember that you lose some rearview clarity in the night position.

# Electric Chromic Mirror (ECM) (if equipped)

The electric rearview mirror automatically controls the glare from the headlamp of the vehicle behind you in nighttime or low light driving conditions.

When the engine is running, the glare is automatically controlled by the sensor mounted in the rearview mirror. The sensor detects the light level around the vehicle, and automatically adjusts to control the head-lamp glare from vehicles behind you.

Whenever the shift lever is placed in R (Reverse), the mirror will automatically go to the brightest setting in order to improve the driver's view behind the vehicle.



To operate the electric rearview mirror:

 Press the ON/OFF button (1) to turn the automatic dimming function off. The mirror indicator light will turn off.

Press the ON/OFF button (1) to turn the automatic dimming function on. The mirror indicator light will illuminate.

 The mirror defaults to the ON position whenever the ignition switch or the Engine Start/Stop button is in the ON position.

#### **Outside rearview mirror**



Be sure to adjust mirror angles before driving.

Your vehicle is equipped with both left-hand 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.

#### **A** WARNING

- The right outside rearview mirror is convex. In some countries, 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.

## **A** WARNING

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 spray 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
   to position the selected mirror
   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 or 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:

- · Without smart key system
  - The mirror will fold or unfold when the door is locked or unlocked by the remote key.

- With smart key system
  - The mirror will fold or unfold when the door is locked or unlocked by the smart key.
  - The mirror will fold or unfold when the door is locked or unlocked by the button on the outside door handle.
  - The mirror will unfold when you approach the vehicle (all doors closed and locked) with a smart key in possession. (if equipped)

#### NOTICE

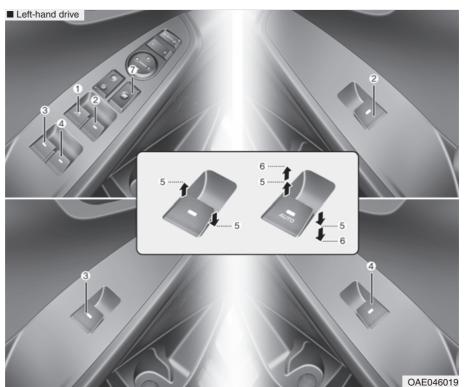
The electric type outside rearview mirror operates even though the ignition switch is in the OFF position. However, to prevent unnecessary battery discharge, do not adjust the mirrors longer than necessary while the engine is not running.

#### NOTICE

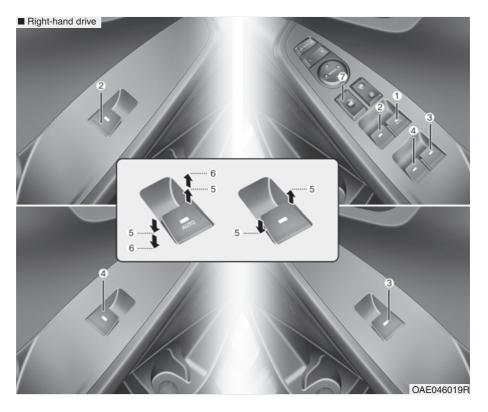
Do not fold the electric type outside rearview mirror by hand. It could cause motor failure.

#### **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



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

The ignition switch 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 ignition switch is placed in the ACC or OFF position. However, if the front doors are opened, the Power Windows will not operate even within the 30 second period.

## **A** 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 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:

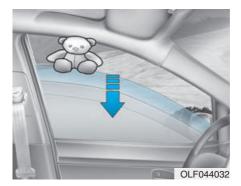
- 1. Place the ignition switch to the ON position.
- Close the window and continue pulling up on the power window switch for at least one second.

If the power windows do not operate properly after resetting, it is recommended that the system be checked by an authorized HYUNDAI dealer.

### **A** WARNING

The automatic reverse feature doesn't activate while resetting 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 30 cm (12 inches) 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 2.5 cm (1 inch). 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.

### **A** 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 4 mm (0.16 inch) 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 the all 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.

### **A** WARNING

- NEVER leave the keys in your vehicle with unsupervised children, when the engine 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 opened, closed, or tilted when the ignition switch is in the ON position.

The sunroof can be operated for approximately 30 seconds after the ignition key is removed or turned to the ACC or LOCK/OFF position. However, if the front door is opened, the suproof connet be operated even

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.

### **A** WARNING

- Never adjust the sunroof or sunshade while driving. 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 engine running and the key in your vehicle with unsupervised children.

(Continued)

### (Continued)

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 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.

### **A** 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 sunroof control lever is not operating correctly

To reset the sunroof, perform the following steps:

- Place the ignition switch to the ON position or start the engine. It is recommended to reset the sunroof while the engine is running.
- Push the control lever forward. The sunroof will close completely or tilt depending on the condition of the sunroof.
- 3. Release the control lever until the sunroof does not move.
- 4. Push the control lever forward about 10 seconds.
  - When the sunroof is in the close 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.)

## 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, we recommend that you contact an authorized HYUNDAI dealer.

# EXTERIOR FEATURES Hood

### Opening the hood



- 1. Park the vehicle and set the parking brake.
- 2. 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 (1).

### **A** WARNING

- Grasp the support rod in the area wrapped in rubber. The rubber will help prevent you from being burned by hot metal when the engine is hot.
- The support rod must be inserted completely into the hole provided whenever you inspect the engine compartment. This will prevent the hood from falling and possibly injuring you.

### Closing the hood

- 1. Before closing the hood, check the following:
  - All filler caps in engine compartment must be correctly installed.
  - Gloves, rags or any other combustible material must be removed from the engine compartment.
- 2. Return the support rod to its clip to prevent it from rattling.
- 3. Lower the hood halfway (lifted approximately 30cm 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.

### **A** WARNING

- Before closing the hood, ensure all obstructions are removed from around the hood opening.
- Always double check to be sure that the hood is firmly latched before driving away.
   Check there is no hood open warning light or message displayed on the instrument cluster. 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.

### **Tailgate**

### Opening the tailgate

Make sure the shift lever 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 remote key or smart key. Press the tailgate handle button and open the tailgate.
- Press and hold the Tailgate Unlock button on the remote key or smart key. Press the tailgate handle button and open the tailgate.
- 3. With the Smart Key in your possession, press the tailgate handle button and open the tailgate.

### Closing the tailgate



Lower the tailgate lid and press down until it locks. To be sure the tailgate lid is securely fastened, always check by trying to pull it up again.

### **A** WARNING

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

## Information

To prevent damage to the tailgate lift cylinders and the attached hardware, always close the tailgate before driving.

### NOTICE

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

### **▲** WARNING

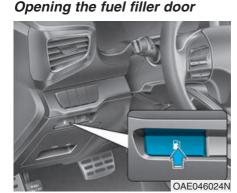


Do not hold the part (gas lifter) that supports the tailgate. Be aware that the deformation of the part may cause vehicle damage and a risk of safety accident.

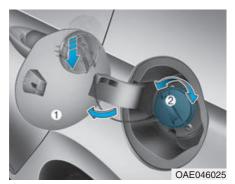
### **A** WARNING

- NEVER allow anyone to occupy the luggage compartment of the vehicle at any time. If the tailgate is partially or totally latched and the person is unable to get out, serious injury or death could occur due to lack of ventilation, exhaust fumes and rapid heat build-up. 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.

## Fuel filler door (Hybrid vehicle)



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



- 3. Pull the fuel filler door (1) out to fully open.
- 4. To remove the fuel tank cap (2), turn it counterclockwise. You may hear a hissing noise as the pressure inside the tank equalizes.
- 5. Place the cap on the fuel filler door.

## **i** Information

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

### Closing the fuel filler door

- 1. To install the fuel tank cap, turn it clockwise until it "clicks" one time.
- 2. Close the fuel filler door until it is latched securely.

### **A** WARNING

Gasoline is highly flammable and explosive. Failure to follow these guidelines may result in SERIOUS INJURY or DEATH:

- Read and follow all warnings posted at the gas station.
- Before refueling, note the location of the Emergency Gasoline Shut-Off, if available, at the gas station.
- Before touching the fuel nozzle, you should eliminate the potential build-up of static electricity by touching a metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source, with your bare hand.

(Continued)

### (Continued)

- Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors and cause a fire.
- Do not get back into a vehicle once you have begun refueling. You can generate a buildup of static electricity by touching, rubbing or sliding against any item or fabric capable of producing static electricity. Static electricity discharge can ignite fuel vapors causing a fire. If you must re-enter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source, with your bare hand.

(Continued)

### (Continued)

- When refueling, always move the shift lever to the P (Park) position, set the parking brake, and place the ignition switch to the LOCK/OFF position. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire.
- When using an approved portable fuel container, be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapors causing a fire. Once refueling has begun, contact between your bare hand and the vehicle should be maintained until the filling is complete.
- Use only approved portable plastic fuel containers designed to carry and store gasoline.

(Continued)

### (Continued)

- Do not use matches or a lighter and do not smoke or leave a lit cigarette in your vehicle while at a gas station, especially during refueling.
- Do not over-fill or top-off your vehicle tank, which can cause gasoline spillage.
- If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station and then contact the local fire department. Follow any safety instructions they provide.
- If pressurized fuel sprays out, it can cover your clothes or skin and thus subject you to the risk of fire and burns. Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if you hear a hissing sound, wait until the condition stops before completely removing the cap.

(Continued)

### (Continued)

 Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

## Information

Make sure to refuel your vehicle according to the "Fuel Requirements" suggested in the Introduction chapter.

### NOTICE

- Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.
- If the fuel filler cap requires replacement, use only a genuine HYUNDAI cap or the equivalent specified for your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system.

# Fuel filler door (Plug-in hybrid vehicle)

### Opening the fuel filler door



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

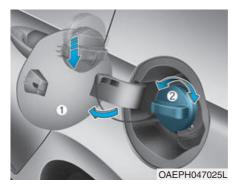


OLFP045236N/OAEPH047525L

- 3. Wait until the fuel tank is depressurized.
  - The message "Fuel door open" is displayed when the fuel filler door opens after the fuel tank is depressurized.

## information

- It may take up to 20 seconds to open the fuel filler door.
- When the fuel filler door is frozen and does not open after 20 seconds at freezing temperature, slightly tap the fuel filler door and then attempt to open it.



- 4. Pull the fuel filler door (1) out to fully open.
- 5. To remove the fuel tank cap (2), turn it counterclockwise. You may hear a hissing noise as the pressure inside the tank equalizes.
- 6. Place the cap on the fuel filler door.

## **A** WARNING

- Add fuel into the fuel tank within 20 minutes after opening the fuel filler door. After 20 minutes, the fuel tank may shut off, causing fuel to overflow. In this case, re-press the fuel filler door opening button.
- Do not leave the fuel filler door opened for an extended period of time. It may discharge the battery.
- Close the fuel filler door after fueling the vehicle. If you start the vehicle with the fuel filler door opened, the message, "Check fuel door", illuminates on the LCD display.
- Avoid refueling the vehicle while charging the (high-voltage) hybrid battery. It may cause a fire or an explosion due to static electricity.

### Closing the fuel filler door

- 1. To install the fuel tank cap, turn it clockwise until it "clicks" one time.
- 2. Close the fuel filler door until it is latched securely.

### **A** WARNING

Gasoline is highly flammable and explosive. Failure to follow these guidelines may result in SERIOUS INJURY or DEATH:

- Read and follow all warnings posted at the gas station.
- Before refueling, note the location of the Emergency Gasoline Shut-Off, if available, at the gas station.
- Before touching the fuel nozzle, you should eliminate the potential build-up of static electricity by touching a metal part of the vehicle, a safe distance away from the fuel filler neck, nozzle, or other gas source, with your bare hand.

(Continued)

### (Continued)

- Do not use cellular phones while refueling. Electric current and/or electronic interference from cellular phones can potentially ignite fuel vapors and cause a fire.
- Do not get back into a vehicle once you have begun refueling. You can generate a buildup of static electricity by touching, rubbing or sliding against any item or fabric capable of producing static electricity. Static electricity discharge can ignite fuel vapors causing a fire. If you must re-enter the vehicle, you should once again eliminate potentially dangerous static electricity discharge by touching a metal part of the vehicle, away from the fuel filler neck, nozzle or other gasoline source, with your bare hand.

(Continued)

### (Continued)

- When refueling, always move the shift lever to the P (Park) position, set the parking brake, and place the ignition switch to the LOCK/OFF position. Sparks produced by electrical components related to the engine can ignite fuel vapors causing a fire.
- When using an approved portable fuel container, be sure to place the container on the ground prior to refueling. Static electricity discharge from the container can ignite fuel vapors causing a fire. Once refueling has begun, contact between your bare hand and the vehicle should be maintained until the filling is complete.
- Use only approved portable plastic fuel containers designed to carry and store gasoline.

(Continued)

### (Continued)

- Do not use matches or a lighter and do not smoke or leave a lit cigarette in your vehicle while at a gas station, especially during refueling.
- Do not over-fill or top-off your vehicle tank, which can cause gasoline spillage.
- If a fire breaks out during refueling, leave the vicinity of the vehicle, and immediately contact the manager of the gas station and then contact the local fire department. Follow any safety instructions they provide.
- If pressurized fuel sprays out, it can cover your clothes or skin and thus subject you to the risk of fire and burns. Always remove the fuel cap carefully and slowly. If the cap is venting fuel or if you hear a hissing sound, wait until the condition stops before completely removing the cap.

(Continued)

### (Continued)

 Always check that the fuel cap is installed securely to prevent fuel spillage in the event of an accident.

## *i* Information

Make sure to refuel your vehicle according to the "Fuel Requirements" suggested in the Introduction chapter.

### NOTICE

- Do not spill fuel on the exterior surfaces of the vehicle. Any type of fuel spilled on painted surfaces may damage the paint.
- If the fuel filler cap requires replacement, use only a genuine HYUNDAI cap or the equivalent specified for your vehicle. An incorrect fuel filler cap can result in a serious malfunction of the fuel system or emission control system.

### **INSTRUMENT CLUSTER**

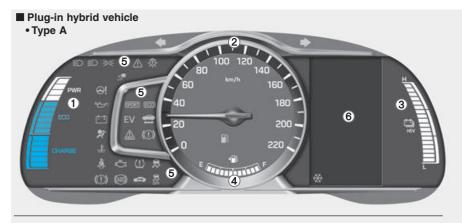




- 1. Power gauge
- 2. Speedometer
- 3. Battery SOC (State of Charge) gauge
- 4. Fuel gauge
- 5. Warning and indicator lights
- 6. LCD display (including Trip computer)

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

OAE047100L/OAE047187L





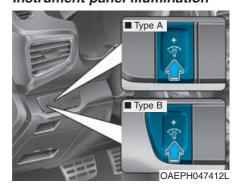
- 1. Power gauge
- 2. Speedometer
- 3. Battery SOC (State of Charge) gauge
- 4. Fuel gauge
- 5. Warning and indicator lights
- 6. LCD display (including Trip computer)

The actual cluster in the vehicle may differ from the illustration.

For more information, refer to the "Gauges and meters" in this chapter.

OAEPH047100L/OAEPH047187L

## Instrument cluster control Instrument panel illumination

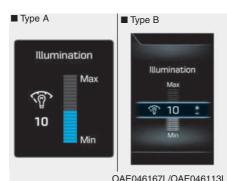


When the vehicle's position lights or headlamps are on, press the illumination control button to adjust the brightness of the instrument panel illumination

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.



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

### Gauges and meters

### Speedometer



ECO mode selected





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

The speedometer for cluster type B is displayed differently according to the mode selected, ECO or SPORT. If the shift lever is in S (Sport), SPORT mode is selected and if the shift lever is in D (Drive), ECO mode is selected.

For more information, refer to "Dual Clutch Transmission" in chapter 5.

### Tachometer



The tachometer indicates the approximate number of engine revolutions per minute (rpm).

Use the tachometer to select the correct shift points and to prevent lugging and/or over-revving the engine.

### NOTICE

Do not operate the engine within the tachometer's RED ZONE. This may cause severe engine damage.

### Power gauge



The power gauge indicates whether the current driving condition is fuel efficient or not.

#### CHARGE:

Shows that the energy made by the vehicle is being converted to electrical energy. (Regenerated energy)

• ECO :

Shows that the vehicle is being driven in an Eco-friendly manner.

POWER :

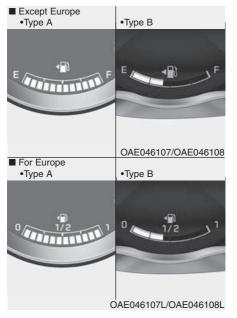
Shows that the vehicle is exceeding the Eco-friendly range.

## **i** Information

Accordance to the power gauge area the "EV" indicator comes on or off.

- "EV" indicator ON: Vehicle is driven using the electric motor or the gasoline engine is stopped.
- "EV" indicator OFF: Vehicle is driven using the gasoline engine.

## Fuel gauge



This gauge indicates the approximate amount of fuel remaining in the fuel tank.

### Information

- The fuel tank capacity is given in chapter 8.
- The fuel gauge is supplemented by a low fuel warning light, which will illuminate when the fuel tank is nearly empty.
- On inclines or curves, the fuel gauge pointer may fluctuate or the low fuel warning light may come on earlier than usual due to the movement of fuel in the tank.

## **A** WARNING

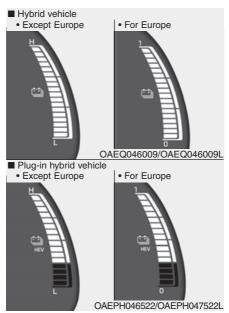
Running out of fuel can expose vehicle occupants to danger.

You must stop and obtain additional fuel as soon as possible after the warning light comes on or when the gauge indicator comes close to the "0 or E (Empty)" level.

### NOTICE

Avoid driving with an extremely low fuel level. Running out of fuel could cause the engine to misfire damaging the catalytic converter.

# Hybrid battery SOC (State of Charge) gauge



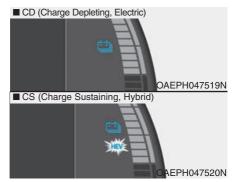
This gauge indicates the remaining hybrid battery power. If the SOC is near the "0 or L (Low)" level, the vehicle automatically operates the engine to charge the battery.

However, if the Service Indicator ( ) and Malfunction Indicator Lamp (MIL) ( ) turn on when the SOC gauge is near the "0 or L (Low)" level, we recommend the vehicle be checked by an authorized HYUNDAI dealer.

### NOTICE

Never try to start the vehicle if the fuel tank is empty. In this condition, the engine cannot charge the high voltage battery of the hybrid system. If you try to start the vehicle when the fuel is empty, the high voltage battery will become discharged and be damaged.

### Plug-in hybrid mode indicator

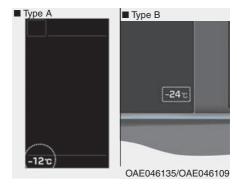


- CD (Charge Depleting, Electric) mode: The high-voltage (hybrid) battery is used to drive the vehicle.
- CS (Charge Sustaining, Hybrid) mode: The high-voltage (hybrid) battery and gasoline engine is used to drive the vehicle.

## **i** Information

Even when the battery charging rate is high and driving in electric mode is possible, engine may turn on in some areas to protect the system.

### Outside temperature gauge



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

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

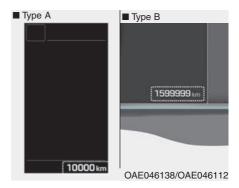
The outside temperature on the display may not immediately change like a general thermometer not to distract the driver.

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 "Other Features -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.

#### **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 the remaining fuel.
- If the estimated distance is below 1 km (1 mi.), the trip computer will display "----" as distance to empty.
- The distance to empty for cluster type B is displayed differently according to the mode selected, ECO or SPORT. If the shift lever is in S (Sport), SPORT mode is selected and if the shift lever is in D (Drive), ECO mode is selected.

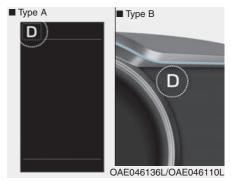
For more information, refer to "Dual Clutch Transmission" in chapter 5.

• The Distance to Empty for cluster type A is mentioned in "Trip Computer" in this chapter.

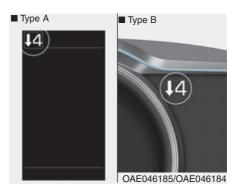
## *i* Information

- 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 trip computer may not register additional fuel if less than 6 liters (1.5 gallon) of fuel are added to the vehicle.
- The fuel economy and distance to empty may vary significantly based on driving conditions, driving habits, and condition of the vehicle.

## Dual clutch transmission shift indicator



This indicator displays which shift lever position is selected.



Dual clutch transmission shift indicator in Manual Shift mode (for Europe, if equipped)

In the Manual Shift mode, this indicator informs which gear is recommended while driving, to save fuel.

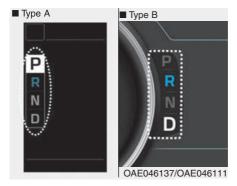
- Shifting up : ▲2, ▲3, ▲4, ▲5, ▲6
- Shifting down :  $\[ \] \] 1$ ,  $\[ \] 2$ ,  $\[ \] 3$ ,  $\[ \] 4$ ,

For example

▲ ∃: Indicates that shifting up to the 3rd gear is recommended (currently the shift lever is in the 2nd or 1st gear).

▼3: Indicates that shifting down to the 3rd gear is recommended (currently the shift lever is in the 4th, 5th, or 6th gear).

When the system is not working properly, the indicator is not displayed.



Shift indicator pop-up (if equipped)

The pop-up indicates the current gear position displayed in the cluster for about 2 seconds when shifting into other positions (P/R/N/D).

### Warning and indicator lights

## **i** Information

Make sure that all warning lights are OFF after starting the engine. 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, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### EV Mode Indicator



### Charging Cable Connection Indicator (Plug-in hybrid vehicle)



This indicator illuminates when the vehicle is driven by the electric motor.

### Service Warning Light



### Air Bag Warning Light



This warning light illuminates:

- When the ignition switch or the Engine Start/Stop button is in the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a problem with the hybrid vehicle control system or hardware.

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

### This warning light illuminates:

 Once you turn the ignition switch or the Engine Start/Stop button to the ON position.

This indicator illuminates in red when

the charging cable is connected.

- It illuminates for approximately 6 seconds and then goes off.
- When there is a malfunction with the SRS.

In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### Seat Belt Warning Light



# Parking Brake & Brake Fluid Warning Light



This warning light informs the driver that the seat belt is not fastened.

For more information, refer to "Seat Belts" in chapter 2.

### This warning light illuminates:

- Once you turn the ignition switch or the Engine Start/Stop button to 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.
- 2. With the engine stopped, check the brake fluid level immediately and add fluid as required (For more information, refer to "Brake Fluid" in chapter 7). After adding brake fluid, check all brake components for fluid leaks. If a brake fluid leak is found, or if the warning light remains on, or if the brakes do not operate properly, do not drive the vehicle. We recommend that you 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 is required to stop the vehicle.

Also, the vehicle will not stop in as short a distance with only a portion of the brake system working.

If the brakes fail while you are driving, shift to a lower gear for additional engine braking and stop the vehicle as soon as it is safe to do so.

### **A** 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, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

# Regenerative Brake Warning Light



# Anti-lock Brake System (ABS) 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 we recommend that you 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. This warning light illuminates:

- Once you turn the ignition switch or the Engine Start/Stop button to 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, we recommend that you 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, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### **A** 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.

(Continued)

### (Continued)

In this case, avoid high speed driving and abrupt braking.

We recommend you have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

i 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, we recommend you have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

# Electric Power Steering (EPS) Warning Light



This warning light illuminates:

- Once you turn the ignition switch or the Engine Start/Stop button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the EPS.

In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### Malfunction Indicator Lamp (MIL)



This warning light illuminates:

- Once you turn the ignition switch or the Engine Start/Stop button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When there is a malfunction with the emission control system.

In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

#### NOTICE

Driving with the Malfunction Indicator Lamp (MIL) on may cause damage to the emission control system which could affect drivability and/or fuel economy.

### NOTICE

If the Malfunction Indicator Lamp (MIL) illuminates, potential catalytic converter damage is possible which could result in loss of engine power.

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

## Charging System Warning Light



When this warning light illuminates while running the engine, the battery is not being charged. Immediately turn OFF all electrical accessories. Try not to use electrically operated controls, such as the power windows. Keep running the engine.

We recommend that you have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

### Engine Oil Pressure Warning Light



### This warning light illuminates:

When the engine oil pressure is low.

### If the engine oil pressure is low:

- 1. Drive carefully to the nearest safe location and stop your vehicle.
- Turn the engine off and check the engine oil level (For more information, refer to "Engine Oil" in chapter 7). If the level is low, add oil as required.

If the warning light remains on after adding oil or if oil is not available, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer as soon as possible.

### NOTICE

- If the engine does not stop immediately after the Engine Oil Pressure Warning Light is illuminated, severe damage could result.
- If the warning light stays on while the engine is running, it indicates that there may be serious engine damage or malfunction. In this case:
  - 1. Stop the vehicle as soon as it is safe to do so.
  - 2. Turn off the engine and check the oil level. If the oil level is low, fill the engine oil to the proper level.
  - Start the engine again. If the warning light stays on after the engine is started, turn the engine off immediately. In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### Low Fuel Level Warning Light



### This warning light illuminates:

When the fuel tank is nearly empty.
 Add fuel as soon as possible.

### NOTICE

Driving with the Low Fuel Level warning light on or with the fuel level below "0 or E" can cause the engine to misfire and damage the catalytic converter (if equipped).

### Engine Coolant Temperature Warning Light



### Master Warning Light



### Low Tire Pressure Warning Light (if equipped)



This warning light illuminates:

 When the engine coolant temperature is above 120°C (248°F). This means that the engine is overheated and may be damaged.

If your vehicle is overheated, refer to "Overheating" in chapter 6.

## Overspeed Warning Light (if equipped)

120 km/h

This warning light blinks:

- When you drive the vehicle more than 120 km/h.
  - This is to prevent you from driving your vehicle with overspeed.
  - The overspeed warning chime also sounds for approximately 5 seconds.

### This indicator light illuminates:

- When there is a malfunction in operation in any of the following systems:
  - Low washer fluid (if equipped)
  - Exterior lamp malfunction
  - Blind Spot Detection (BSD) malfunction (if equipped)
  - Autonomous Emergency Braking (AEB) malfunction (if equipped)
  - Smart cruise control malfunction (if equipped)
  - Tire Pressure Monitoring System (TPMS, if equipped)
  - Service reminder

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

### This warning light illuminates:

- Once you turn the ignition switch or Engine Start/Stop button to the ON position.
  - It illuminates for approximately 3 seconds and then goes off.
- When one or more of your tires are significantly underinflated.

For more information, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6. This warning light remains ON after blinking for approximately 60 seconds, or repeatedly blinks ON and OFF in 3 second intervals:

 When there is a malfunction with the TPMS.

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

For more information, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.

### **A** 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



### This indicator light illuminates:

- Once you turn the ignition switch or the Engine Start/Stop button to 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, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### This indicator light blinks:

• While the ESC is operating.

For more information, refer to "Electronic Stability Control (ESC)" in chapter 5.

### Electronic Stability Control (ESC) OFF Indicator Light



### This indicator light illuminates:

- Once you turn the ignition switch or the Engine Start/Stop button to 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 information, refer to "Electronic Stability Control (ESC)" in chapter 5.

### Immobilizer Indicator Light (without smart key) (if equipped)



### This indicator light illuminates:

- When the vehicle detects the immobilizer in the key with the ignition switch in the ON position.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

### This indicator light blinks:

 When there is a malfunction with the immobilizer system.

In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### Immobilizer Indicator Light (with smart key) (if equipped)



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

- When the vehicle detects the smart key in the vehicle with the Engine Start/Stop button in the ACC or ON position.
  - At this time, you can start the engine.
  - The indicator light goes off after starting the engine.

## This indicator light blinks for a few seconds:

- When the smart key is not in the vehicle.
  - At this time, you cannot start the engine.

## This indicator light illuminates for 2 seconds and goes off:

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

In this case, we recommend that you 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 can not start the engine. However, you can start the engine if you press the Engine Start/Stop button with the smart key. (For more information, refer to "Starting the Engine" in chapter 5).
- When there is a malfunction with the immobilizer system.

In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### Turn Signal Indicator Light



# Low Beam Indicator Light (if equipped)



### Rear Fog Indicator Light (if equipped)



#### 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, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

### This indicator light illuminates:

• When the headlights are on.

### High Beam Indicator Light



### This indicator light illuminates:

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

# Light ON Indicator Light



### This indicator light illuminates:

 When the tail lights or headlamps are on.

### This indicator light illuminates:

• When the rear fog lights are on.

## Exterior Light Warning Light (if equipped)



#### This warning light illuminates:

 When one of the exterior bulbs (headlamp, tail lamp, fog lamp, etc.) is not operating properly. One of the bulbs may need to be replaced.

## *i* Information

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

### LED Headlamp Warning Light (if equipped)



### This warning light illuminates:

- When you turn the ignition switch or the Engine Start/Stop button to the ON position.
- When there is a malfunction with the LED headlamp.

In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### This warning light blinks:

When there is a malfunction with a LED headlamp related part.

In this case, we recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

### NOTICE

Continuous driving with the LED Headlamp Warning Light on or blinking can reduce LED headlamp life.

### Cruise Indicator Light (if equipped)



CRUISE

■ Type B

### This indicator light illuminates:

 When the cruise control system is enabled.

For more information, refer to "Cruise Control System" in chapter 5.

## Cruise SET Indicator Light (if equipped)



### This indicator light illuminates:

 When the cruise control speed is set.

For more information, refer to "Cruise Control System" in chapter 5.

## Speed Limiter Indicator Light (if equipped)



## This indicator light illuminates when:

When the speed limiter is enabled.

### SPORT Mode Indicator Light



This indicator light illuminates

• When the driver moves the shift lever to S (Sport).

For more information, refer to "Dual Clutch Transmission" in chapter 5.

### ECO Mode Indicator Light



This indicator light illuminates:

 When the driver moves the shift lever to D (Drive).

For more information, refer to "Dual Clutch Transmission" in chapter 5.

### Autonomous Emergency Braking (AEB) Warning Light (if equipped)



This warning light illuminates:

- When the AEB system is turned off.
- When the radar sensor or cover is blocked with dirt or snow. Check the sensor and cover and clean them by using a soft cloth.
- When there is a malfunction with AEB. In this case, we recommend that you have your vehicle inspected by an authorized dealer of HYUNDAI.

### Lane Keeping Assist System (LKAS) Indicator Light (if equipped)



This indicator light illuminates:

- [Green] When the system operating conditions are satisfied for LKAS.
- [White] When the system operating conditions are not satisfied or when the sensor does not detect the lane line.
- [Yellow] When there is a malfunction with the lane keeping assist system.

In this case, we recommend that you have your vehicle inspected by to an authorized dealer of HYUNDAI.

For more information, refer to "Lane Keeping Assist System (LKAS)" in chapter 5.

### LCD display messages

# Shift to P (for smart key system)

This warning message is displayed if you try to turn off the vehicle with the shift lever in the N (Neutral) position. At this time, the Engine Start/Stop button turns to the ACC position (If you press the Engine Start/Stop button once more, it will turn to the ON position).

## Low Key Battery (for smart key system)

This warning message is displayed if the battery of the smart key is discharged while changing the Engine Start/Stop button to the OFF position.

### Press START button while turning wheel (for smart key system)

This warning message is displayed if the steering wheel does not unlock normally when the Engine Start/Stop button is pressed.

You should press the Engine Start/Stop button while turning the steering wheel right and left.

### Check Steering Wheel Lock System (for smart key system)

This warning message is displayed if the steering wheel does not lock normally while the Engine Start/Stop button changes to the OFF position.

# Press brake pedal to start vehicle (for smart key system)

This warning message is displayed if the Engine 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 (for smart key system)

This warning message is displayed if the smart key is not in the vehicle when you press the Engine Start/Stop button.

When attempting to start the vehicle, always have the smart key with you.

# Key not detected (for smart key system)

This warning message is displayed if the smart key is not detected when you press the Engine Start/Stop button.

## Press START button again (for smart key system)

This message is displayed if you were unable to start the vehicle when the Engine Start/Stop button was pressed.

If this occurs, attempt to start the engine by pressing the Engine Start/Stop button again.

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

# Press START button with key (for smart key system)

This warning message is displayed if you press the Engine Start/Stop button while the warning message "Key not detected" is displayed.

At this time, the immobilizer indicator liaht blinks.

# Check BRAKE SWITCH fuse (for smart key system)

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 engine.

If that is not possible, you can start the engine by pressing the Engine Start/Stop button for 10 seconds in the ACC position.

# Shift to P to start vehicle (for smart key system)

This warning message is displayed if you try to start the engine with the shift lever not in the P (Park) position.

# Door, Hood, Tailgate Open

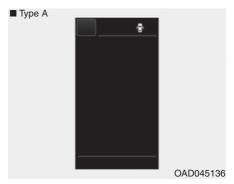


OAE046165

This warning is displayed indicating which door, or hood, or tailgate is open.

# **!**\CAUTION

Before driving the vehicle, you should confirm that the door/ hood/tailgate is fully closed. Also, check there is no door /hood/tailgate open warning light or message displayed on the instrument cluster.



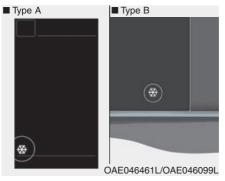
If the door/tailgate open warning is blocked with another warning message, an icon will appear on the top of the LCD display.

# Sunroof Open (if equipped)



This warning is displayed if you turn off the engine when the sunroof is open.

# Icy Road Warning Light (if equipped)



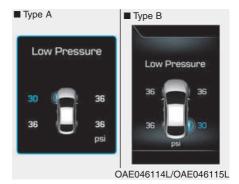
This warning light is to warn the driver the road may be icy.

When the temperature on the outside temperature gauge is approximately below 4°C (40°F), the lcy 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.

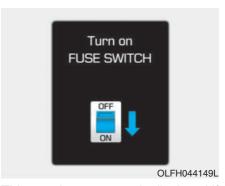
## Low Pressure (if equipped)



This warning message is displayed if the tire pressure is low. The corresponding tire on the vehicle will be illuminated.

For more information, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.

# 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 information, refer to "Fuses" in chapter 7.

# 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.

#### Low Fuel

This warning message is displayed if the fuel tank is almost out of fuel.

When this message is displayed, the low fuel level warning light in the cluster will come on.

It is recommended to look for the nearest fueling station and refuel as soon as possible.

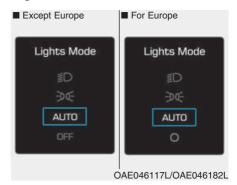
Add fuel as soon as possible.

# Engine has overheated

This warning message is displayed when the engine coolant temperature is above 120°C (248°F). This means that the engine is overheated and may be damaged.

If your vehicle is overheated, refer to "Overheating" in chapter 6.

# Lights Mode



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

# Wiper



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

# Check headlight (if equipped)

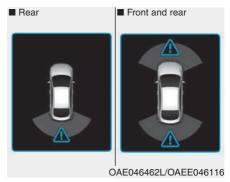


This warning message is displayed if the headlamps are not operating properly. A headlamp bulb may need to be replaced.

# i Information

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

# Parking assist system malfunction (if equipped)



This warning is displayed if there is a problem with the Parking Assist System. We recommend you to have the vehicle inspected by an authorized dealer of HYUNDAI.

For more information, refer to "Driver Assist System" in chapter 3.

# Check Active Air Flap System



This 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 Hybrid system



This message is displayed when there is a problem with the hybrid control system.

Refrain from driving when the warning message is displayed.

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

# Check Hybrid system. Turn off engine



This message is displayed when there is a problem with the hybrid system. The " " indicator will blink and a warning chime will sound until the problem is solved.

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

# Check Hybrid system. Do not start engine



This message is displayed when the hybrid battery power (SOC) level is low. A warning chime will sound until the problem is solved.

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

# Stop vehicle and check power supply



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

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

# Stop vehicle to charge battery



This message is displayed when the hybrid battery power (SOC) level is low.

In this case, park the vehicle in a safe location and wait until the hybrid battery is charged.

# Refuel to prevent Hybrid battery damage



This message is displayed when the fuel tank is nearly empty.

You should refill the fuel tank to prevent hybrid battery damage.

# Refill inverter coolant



This message is displayed when the inverter coolant is nearly empty.

You should refill the inverter coolant.

# Stop vehicle and check brakes



This message is displayed when a failure occurs in the brake system.

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

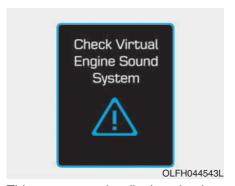
## Check brakes



This message is displayed when the brake performance is low or the regenerative brake does not work properly due to a failure in the brake system.

In this case, it may take longer for the brake pedal to operate and the braking distance may become longer.

# Check Virtual Engine Sound System



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

In this case, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

# Unplug vehicle to start (Plug-in hybrid vehicle)



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

# Remaining charge time (Plug-in hybrid vehicle)



This message is displayed to notify the remaining time to fully charge the battery.

# Wait until fuel door opens (Plug-in hybrid vehicle)



This message is displayed when you attempt to open the fuel filler door with the fuel tank pressurized. Wait until the fuel tank is depressurized.

# Information

It may take up to 20 seconds to open fuel filler door.

# Check fuel door (Plug-in hybrid vehicle)



This message is displayed when there is a problem with the fuel filler door. Such as, when the fuel filler door does not open after 20 seconds at freezing temperature.

# **i** Information

When the fuel filler door is frozen and does not open after 20 seconds at freezing temperature, slightly tap the fuel filler door and then attempt to open it. In other cases, we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

# Fuel door open (Plug-in hybrid vehicle)



This message is displayed when the fuel filler door opens after the fuel tank is depressurized. If this message is displayed, you can refuel the fuel tank.

# Check fuel door (Plug-in hybrid vehicle)



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

# Shift to P to charge (Plug-in hybrid vehicle)



This message is displayed when the charging connector is plugged with the shift lever in R (Reverse), N (Neutral) or D (Drive). Move the shift lever to P (Park) and re-start the charging process.

# Charger Error! (Plug-in hybrid vehicle)



This message is displayed when there is a problem with the charger.

# Aux. Battery Saver+ used while parked (Plug-in hybrid vehicle)



This message is displayed when the Aux. Battery Saver+ function has been completed when the vehicle is turned ON.

For more information, refer to "Hybrid System Overview" provided in the front of the owner's manual.

# Switching to Hybrid mode to allow heating or air conditioning (Plug-in hybrid vehicle)



This message is displayed when the vehicle automatically switches to HEV mode to allow heating or air conditioning. It is when the coolant temperature is low (below -14°C) and the driver turns on the heating or cooling system.

If the coolant temperature gets higher than -14°C or the driver turns off the heating or cooling system the vehicle returns to its default (EV) mode.

# Maintaining Hybrid mode to allow heating or air conditioning (Plug-in hybrid vehicle)



vehicle maintains the HEV mode to allow heating or air conditioning. The mode does not change when the driver presses the [EV/HEV] button to switch from the HEV mode to EV

This message is displayed when the

to switch from the HEV mode to EV mode while the heating and cooling system is on and the coolant temperature is below -14°C.

# Low/High System Temp. Maintaining Hybrid mode (Plug-in hybrid vehicle)



This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or too high. This warning message is to protect the battery and the hybrid system.

## Low/High System Temp. Switching to Hybrid mode (Plug-in hybrid vehicle)



This message is displayed when the temperature of the high-voltage (hybrid) battery is too low or high. This warning message is to protect the battery and the hybrid system.

# Switching to Hybrid mode to lubricate engine (Plug-in hybrid vehicle)



This message is displayed when the vehicle is automatically switched to the HEV mode to lubricate engine while the ignition switch is in the ON position.

# Maintaining Hybrid mode to protect engine (Plug-in hybrid vehicle)



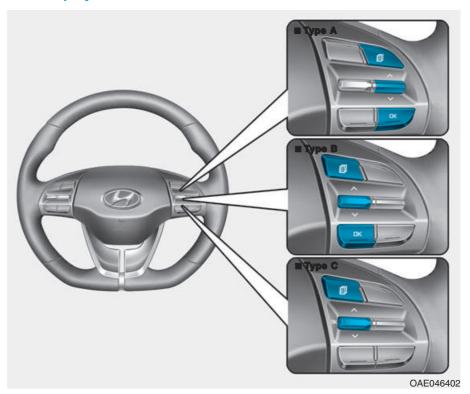
This message is displayed when the [EV/HEV] button is pressed but it is impossible to switch from the HEV mode to EV mode due to engine lubrication.

# Exit SPORT to switch to electric mode (Plug-in hybrid vehicle)



This message is displayed when [EV/HEV] button is pressed but it is impossible to switch from the HEV mode to EV mode because the SPORT mode is engaged.

# LCD DISPLAY LCD display control



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

- (1) **回**: MODE button for changing modes
- (2) \( \setminus, \square : MOVE switch for changing items
- (3) OK: SELECT/RESET button for setting or resetting the selected item

# LCD display modes (for cluster type A)

| Modes              | Symbol   | Explanation   |
|--------------------|----------|---|
| Trip Computer      |          | This mode displays driving information like the tripmeter, fuel economy, etc.   |
|                    |          | For more information, refer to "Trip Computer" in this chapter.   |
| Turn By Turn (TBT) | t        | This mode displays the state of the navigation.   |
| SCC/LKAS           |          | This mode displays the state of :   |
|                    |          | - Lane Keeping Assist System (LKAS)<br>- Smart Cruise Control   |
|                    |          | Sinari Graido Gornior   |
|                    |          | For more information, refer to "Smart Cruise Control (SCC)" and  "Lane Keeping Assist System (LKAS)" in chapter 5.              |
| A/V                | n        | This mode displays the state of the A/V system.   |
| Information        | or or or | This mode displays the service interval (mileage or days) and warning messages related to the Blind Spot Detection system, etc. |
| User Settings      | •        | In this mode, you can change settings of the doors, lamps, etc.   |

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

#### Edit settings after shifting to P

This warning message appears if you try to adjust the User Settings while driving.

For your safety, change the User Settings after parking the vehicle, applying the parking brake and moving the shift lever 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 information about each system, refer to this Owner's Manual.

# Trip computer mode



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

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

# Turn By Turn (TBT) mode (if equipped)



This mode displays the state of the navigation.

# SCC/LKAS mode (if equipped)



This mode displays the state of the Smart Cruise Control (SCC) and Lane Keeping Assist System (LKAS).

For more information, refer to "Smart Cruise Control (SCC)" and "Lane Keeping Assist System (LKAS)" in chapter 5.

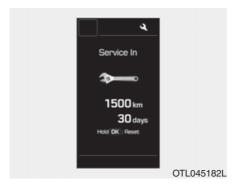
# A/V mode (if equipped)



This mode displays the state of the A/V system.

#### Information mode

This mode displays the service interval (mileage and days).

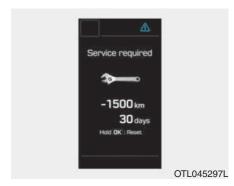


#### Service interval

Service in

It calculates and displays the maintenance schedule (mileage or days), as set in the system.

When the set mileages or days passed, "Service in" message is displayed for several seconds each time ignition switch is turned ON.



## Service required

If you exceed the specified service interval, a message indicating, "Service required" will be displayed each time you turn ON the vehicle.

To reset the service interval in mileages or days that you initially set, press the OK button for more than 1 second.



#### Service in OFF

If the service interval is not set, "Service in OFF" message is displayed on the LCD display.

# *i* Information

If any of the following conditions occur, the mileage and number of days to service may be incorrect.

- The battery cable is disconnected.
- The fuse switch is turned off.
- The battery is discharged.

## Warning message

If one of followings occurs, warning messages will be displayed in the information mode for several seconds.

- Low washer fluid (if equipped)
- Exterior lamp malfunction (if equipped)
- Blind Spot Detection (BSD) malfunction (if equipped)
- Tire Pressure Monitoring System (TPMS) malfunction (if equipped)
- Autonomous Emergency Braking (AEB) malfunction (if equipped)
- Smart cruise control malfunction (if equipped)
- Service reminder (if equipped)

## User settings mode

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

- 1. Driving Assist
- 2. Door
- 3. Lights
- 4. Sound
- 5. Convenience
- 6. Service Interval
- 7. Other Features
- 8. Reset

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

#### 1. Driving Assist

- Lane Keeping Assist System
- Lane Departure/Standard LKA/ Active LKA

To adjust the sensitivity of the Lane Keeping Assist System.

For more information, refer to the "Lane Keeping Assist System" in chapter 5.

- Smart Cruise Control
- Response (Slow/Normal/Fast)
   To adjust the sensitivity of the Smart Cruise Control system.

# For more information, refer to the "Smart Cruise Control" in chapter 5.

- Forward Collision Warning
- Autonomous Emergency Braking
   To activate or deactivate the AEB system.
- Late/Normal/Early

To adjust the initial warning alert time for Autonomous Emergency Braking system.

For more information, refer to "Autonomous Emergency Braking (AEB)" in chapter 5.

- Rear Collision Warning
- Rear Cross Traffic Alert
   To activate or deactivate the Rear Cross Traffic Alert system.
- Blind Spot Detection Sound
   To activate or deactivate the Blind Spot Detection sound.

For more information, refer to "Blind Spot Detection" in chapter 5.

- Coasting Guide
- Coasting Guide: To activate or deactivate the Coasting Guide system.
- Sound: To activate or deactivate the Coasting Guide system sound.
- Start Coasting (Late/Normal/Early)
   To adjust the sensitivity of the Coasting Guide.

For more information, refer to "Coasting Guide" in chapter 5.

#### 2. Door

- Auto Lock
- Disable: The auto door lock operation will be canceled.
- Enable on Speed: All doors will be automatically locked when the vehicle speed exceeds 15km/h (9.3mph).
- Enable on Shift: All doors will be automatically locked if the automatic transmission shift lever is shifted from the P (Park) position to the R (Reverse), N (Neutral), or D (Drive) position.

- Auto Unlock
- Disable: The auto door unlock operation will be canceled.
- Vehicle Off: All doors will be automatically unlocked when the Engine Start/Stop button is set to the OFF position. (if equipped with smart key)
- On Key Out: All doors will be automatically unlocked when the ignition key is removed from the ignition switch. (if equipped with remote key)
- On Shift to P: All doors will be automatically unlocked if the automatic transmission shift lever is shifted to the P (Park) position.

#### Horn Feedback

To activate or deactivate the horn feedback.

If the horn feedback is activated, after locking the door by pressing the lock button on the remote key, and pressing it again within 4 seconds, the horn feedback sound will operate once to indicate that all doors are locked.

## 3. Lights

- One Touch Turn Signal
- Off: The one touch turn signal function will be deactivated.
- 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 information, refer to "Light" in this chapter.

Headlamp Delay

To activate or deactivate the headlamp delay function.

For more information, refer to "Light" in this chapter

#### 4. Sound

- Park Assist System Volume
- Level 1~3

To adjust the Park Assist System volume.

#### 5. Convenience

- Seat Easy Access
- Off: The seat easy access function is deactivated.

 Normal/Extended: When you turn off the engine, the driver's seat will automatically move rearward short (Normal) or long (Extended) for you to enter or exit the vehicle more comfortably.

For more information, refer to "Driver Position Memory System" in this chapter.

Wireless Charging System

To activate or deactivate the wireless charging system in the front seat.

For more information, refer to "Wireless Charging System" in this chapter.

Wiper/Lights Display

To activate or deactivate the Wiper/Light mode.

When activated, the LCD display shows the selected Wiper/Light mode whenever you change the mode.

Gear Position Pop-up

To activate or deactivate the gear position pop-up.

When activated, the gear position will be displayed on the LCD display.

#### 6. 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.

# Information

To use the service interval menu, consult an authorized HYUNDAI dealer.

If the service interval is activated and the time and distance is adjusted, messages are displayed in the following situations each time the vehicle is turned on.

- Service in
  - Displayed to inform the driver the remaining mileage and days to service.
- Service required
  - Displayed when the mileage and days to service has been reached or passed.

# *i* Information

If any of the following conditions occur, the mileage and number of days to service may be incorrect.

- The battery cable is disconnected.
- The fuse switch is turned off.
- The battery is discharged.

#### 7. Other Features

Aux. Battery Saver+

To activate or deactivate the Aux. Battery Saver+ function.

When activated, the high voltage battery is used to keep the 12V battery charged.

For more information, refer to the "Hybrid System Overview" provided in the front of the owner's manual.

- Fuel Economy Auto Reset
- Off: The average fuel economy will not reset automatically whenever refueling.
- After Ignition: When the engine has been OFF for 4 hours or longer the average fuel economy will reset automatically.

- After Refueling: The average fuel economy will reset automatically after adding 6 liters (1.6 gallons) of fuel or more and after driving speed exceeds 1 km/h (1 mph).

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

- Fuel Economy Unit
   To select the fuel economy unit. (km/L, L/100, MPG)
- Temperature Unit
   To select the temperature unit. (°C,°F)
- Tire Pressure Unit
   To select the tire pressure unit.
   (psi, kPa, bar)
- Language
   To select language.

#### 8. 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.

# LCD display modes (for cluster type B)

| Modes              | Symbol      | Explanation   |
|--------------------|-------------|---|
| Trip Computer      |             | This mode displays driving information like the tripmeter, fuel economy, etc.  For more information, refer to "Trip Computer" in this chapter.  |
| Turn By Turn (TBT) | <b>L</b>    | This mode displays the state of the navigation.   |
| Assist             |             | This mode displays the state of : - Lane Keeping Assist System (LKAS) - Smart Cruise Control - Tire Pressure For more information, refer to "Smart Cruise Control (SCC)", "Lane Keeping Assist System (LKAS)" in chapter 5 and "Tire Pressure Monitoring System (TPMS)" in chapter 6. |
| User Settings      | •           | In this mode, you can change settings of the doors, lamps, etc.   |
| Warning            | $\triangle$ | This mode displays warning messages related to the Blind Spot Detection system, etc.  |

The information provided differs according to the items applied to your vehicle.

#### Edit settings after shifting to P



This warning message appears if you try to adjust the User Settings while driving.

For your safety, change the User Settings after parking the vehicle, applying the parking brake and moving the shift lever 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 information about each system, refer to this Owner's Manual.

# Trip computer mode



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

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

# Turn By Turn (TBT) mode



This mode displays the state of the navigation.

# Assist mode



#### SCC/LKAS

This mode displays the state of the Smart Cruise Control (SCC) and Lane Keeping Assist System (LKAS).

For more information, refer to "Smart Cruise Control (SCC)"and "Lane Keeping Assist System (LKAS)" in chapter 5.



#### **Tire Pressure**

This mode displays information related to Tire Pressure.

For more information, refer to "Tire Pressure Monitoring System (TPMS)" in chapter 6.

## Warning mode

If one of followings occurs, warning messages will be displayed on the LCD display for several seconds.

- Lower washer fluid (if equipped)
- Exterior lamp malfunction (if equipped)
- Blind Spot Detection (BSD) malfunction (if equipped)
- Autonomous Emergency Braking (AEB) malfunction (if equipped)
- Smart cruise control malfunction (if equipped)
- Tire Pressure Monitoring System (TPMS) malfunction (if equipped)

# User settings mode

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

- 1. Driving Assist
- 2. Door
- 3. Lights
- 4. Sound
- 5. Convenience
- 6. Service Interval
- 7. Other Features
- 8. Reset

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

# 1. Driving Assist

- Lane Keeping Assist System
- Lane Departure/Standard LKA/Active LKA

To adjust the sensitivity of the Lane Keeping Assist System.

For more information, refer to the "Lane Keeping Assist System" in chapter 5.

- Smart Cruise Control Response
- Slow/Normal/Fast

To adjust the sensitivity of the Smart Cruise Control system.

For more information, refer to the "Smart Cruise Control" in chapter 5.

 Autonomous Emergency Braking
 To activate or deactivate the Autonomous Emergency Braking (AEB).

For more information, refer to "Autonomous Emergency Braking (AEB)" in chapter 5.

- Forward Collision Warning
- Late/Normal/Early

To adjust the initial warning alert time for Autonomous Emergency Braking system.

For more information, refer to "Autonomous Emergency Braking (AEB)" in chapter 5.

• Rear Cross Traffic Alert

To activate or deactivate the Rear Cross Traffic Alert system.

For more information, refer to "Blind Spot Detection" in chapter 5.

 Blind Spot Detection Sound
 To activate or deactivate the Blind Spot Detection sound.

For more information, refer to "Blind Spot Detection" in chapter 5.

- Coasting Guide
- Coasting Guide: To activate or deactivate the Coasting Guide system.
- Sound: To activate or deactivate the Coasting Guide system sound.

For more information, refer to "Coasting Guide" in chapter 5.

 Start Coasting (Late/Normal/Early)
 To adjust the sensitivity of the Coasting Guide.

For more information, refer to "Coasting Guide" in chapter 5.

#### 2. Door

- Automatically Lock
- Disable: The auto door lock operation will be canceled.
- Enable on Speed: All doors will be automatically locked when the vehicle speed exceeds 15km/h (9.3mph).
- Enable on Shift: All doors will be automatically locked if the automatic transmission shift lever is shifted from the P (Park) position to the R (Reverse), N (Neutral), or D (Drive) position.
- Automatically Unlock
- Disable: The auto door unlock operation will be canceled.
- Vehicle Off: All doors will be automatically unlocked when the Engine Star/Stop button is set to the OFF position. (if equipped with smart key)

- On Key Out: All doors will be automatically unlocked when the ignition key is removed from the ignition switch. (if equipped with remote key)
- On Shift to P: All doors will be automatically unlocked if the automatic transmission shift lever is shifted to the P (Park) position.
- Horn Feedback

To activate or deactivate the horn feedback.

If the horn feedback is activated, after locking the door by pressing the lock button on the remote key, and pressing it again within 4 seconds, the horn feedback sound will operate once to indicate that all doors are locked.

#### 3. Lights

- One Touch Turn Signal
- Off: The one touch turn signal function will be deactivated.
- 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 information, refer to "Light" in this chapter.

Headlamp Delay

To activate or deactivate the headlamp delay function.

For more information, refer to "Light" in this chapter

#### 4. Sound

- Park Assist System Volume
- Softer/Louder

  To adjust the Park Assist System volume

#### 5. Convenience

- Seat Easy Access
- Off: The seat easy access function is deactivated.
- Normal/Extended: When you turn off the engine, the driver's seat will automatically move rearward short (Normal) or long (Extended) for you to enter or exit the vehicle more comfortably.

For more information, refer to "Driver Position Memory System" in this chapter.

• Wireless Charging System

To activate or deactivate the wireless charging system in the front seat.

For more information, refer to "Wireless Charging System" in this chapter.

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.

Gear Position Pop-up

To activate or deactivate the gear position pop-up.

When activated, the gear position will be displayed on the LCD display.

#### 6. 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.

# Information

To use the service interval menu, consult an authorized HYUNDAI dealer.

If the service interval is activated and the time and distance is adjusted, messages are displayed in the following situations each time the vehicle is turned on.

- Service in
  - : Displayed to inform the driver the remaining mileage and days to service.
- Service required
  - : Displayed when the mileage and days to service has been reached or passed.

# **i** Information

If any of the following conditions occur, the mileage and number of days to service may be incorrect.

- The battery cable is disconnected.
- The fuse switch is turned off.
- The battery is discharged.

#### 7. Other Features

Aux. Battery Saver+

To activate or deactivate the Aux. Battery Saver+ function.

When activated, the high voltage battery is used to keep the 12V battery charged.

For more information, refer to the "Hybrid System Overview" provided in the front of the owner's manual.

- Fuel Economy Auto Reset
- Off: The average fuel economy will not reset automatically whenever refueling.
- After Ignition: When the engine has been OFF for 4 hours or longer the average fuel economy will reset automatically.
- After Refueling: The average fuel economy will reset automatically after adding 6 liters (1.6 gallons) of fuel or more and after driving speed exceeds 1 km/h (1 mph).

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

- Fuel Economy Unit
   To select the fuel economy unit. (km/L, L/100, MPG)
- Temperature Unit
   To select the temperature unit.
   (°C,°F)
- Tire Pressure Unit
   To select the tire pressure unit.
   (psi, kPa, bar)
- Language
   To select language.

#### 8. 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.

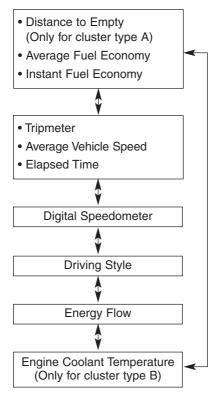
# TRIP COMPUTER (HYBRID VEHICLE)

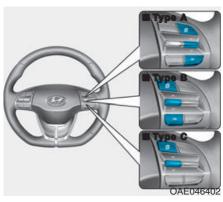
The trip computer is a microcomputer-controlled driver information system that displays information related to driving.

# Information

Some driving information stored in the trip computer (for example Average Vehicle Speed) resets if the battery is disconnected.

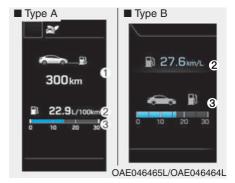
# Trip modes





To change the trip mode, toggle the " $\land$ ,  $\lor$ " switch on the steering wheel.

# Distance to empty/ Average fuel economy/ Instant fuel economy



## Distance to Empty (1)

- The distance to empty is the estimated distance the vehicle can be driven with the remaining fuel.
- If the estimated distance is below 1 km (1 mi.), the trip computer will display "----" as distance to empty.

# 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 trip computer may not register additional fuel if less than 6 liters (2 gallon) of fuel are added to the vehicle.
- The fuel economy and distance to empty may vary significantly based on driving conditions, driving habits, and condition of the vehicle.

#### Average Fuel Economy (2)

- The average fuel economy is calculated by the total driving distance and fuel consumption since the last average fuel economy reset.
- The average fuel economy can be reset both manually and automatically.

#### Manual reset

To clear the average fuel economy manually, press the OK button on the steering wheel for more than 1 second when the average fuel economy is displayed.

#### Automatic reset

To automatically reset the average fuel economy, select between "After Ignition" or "After Refueling" in the User Settings mode on the LCD display.

- After Ignition: When the engine has been OFF for 4 hours or longer the average fuel economy will reset automatically.
- After Refueling: The average fuel economy will reset automatically after adding 1.6 gallons (6 liters) of fuel or more and after driving speed exceeds 1 mph (1 km/h).

# *i* Information

The vehicle must be driven for a minimum of 300 meters (0.19 miles) since the last ignition key cycle before the average fuel economy will be recalculated.

## **Instant Fuel Economy (3)**

 This mode displays the instantaneous fuel economy while driving.

# Tripmeter/Average vehicle speed/ Elapsed time



## Tripmeter (1)

- The tripmeter is the total driving distance since the last tripmeter reset.
- To reset the tripmeter, press the OK button on the steering wheel for more than 1 second when the tripmeter is displayed.

## **Average Vehicle Speed (2)**

- The average vehicle speed is calculated by the total driving distance and driving time since the last average vehicle speed reset.
- To reset the average vehicle speed, press the OK button on the steering wheel for more than 1 second when the average vehicle speed is displayed.

# **i** Information

- The average vehicle speed is not displayed if the driving distance is less than 300 meters (0.19 miles) or the driving time is less than 10 seconds, after resetting the vehicle speed.
- The average vehicle speed will continue to be calculated and will start to decrease if the vehicle is stopped while the engine is still running (for example, when the vehicle is in traffic or stopped at a stop light.)

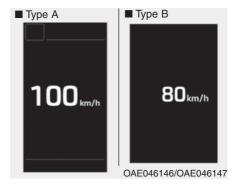
# Elapsed Time (3)

- The elapsed time is the total driving time since the last elapsed time reset.
- To reset the elapsed time, press the OK button on the steering wheel for more than 1 second when the elapsed time is displayed.

# *i* Information

The elapsed time will continue to be counted while the engine is still running (for example, when the vehicle is in traffic or stopped at a stop light.)

# Digital speedometer



This message shows the speed of the vehicle (km/h, MPH).

# Drive Info display



At the end of each driving cycle, the Driving Info message is displayed. This display shows the trip distance (1), the average fuel economy (2), and the remaining vehicle range (3).

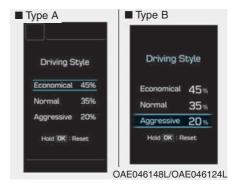
This information is displayed for a few seconds when you turn off the ignition, and then goes off automatically. The information is calculated for each ignition cycle.

If the estimated remaining vehicle range is below 1 km (1 mi.), the distance to empty will display as "----" and a "Low Fuel" warning message (4) will be displayed.

# **i** Information

If sunroof open warning is displayed in the cluster, the Driving Info message will not be displayed.

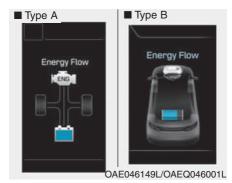
# Driving style



The driving style is displayed when you are driving in ECO mode.

When you drive in SPORT mode, each driving category will be displayed with "--".

# Energy flow



The hybrid system informs the drivers its energy flow in various operating modes. While driving, the current energy flow is specified in 11 modes.

For more information, refer to HEV Energy Flow in the "Hybrid System Overview" provided in front of the owner's manual.

# Engine coolant temperature



This gauge indicates the temperature of the engine coolant when the engine is running.

## NOTICE

When the gauge indicator gets out of the normal range, toward the "H (Hot)" position, it indicates overheating of the engine. It may damage the engine.

Do not continue driving with the overheated engine. For further information, refer to "If the Engine Overheats" in the chapter 6.

# TRIP COMPUTER (PLUG-IN HYBRID VEHICLE)

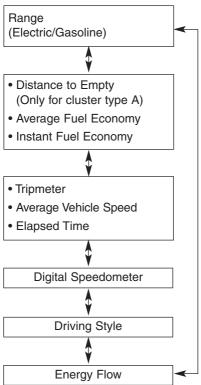
The trip computer is a microcomputer-controlled driver information system that displays information related to driving.

# Information

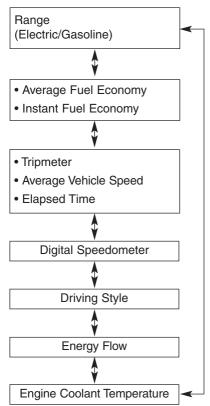
Some driving information stored in the trip computer (for example Average Vehicle Speed) resets if the battery is disconnected.

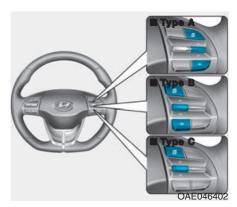
# Trip modes

For cluster type A



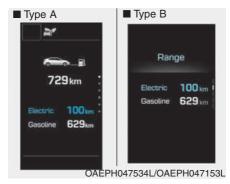
#### For cluster type B





To change the trip mode, toggle the " $\land$ ,  $\lor$ " switch on the steering wheel.

## Range



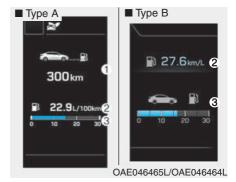
The range is the estimated distance the vehicle can be driven with the remaining fuel in the fuel tank (Gasoline/Petrol) and high-voltage (hybrid) battery (Electric).

If the estimated distance is below 1km (1 mile), the trip computer will display "---" as the range.

# *i* Information

- If the vehicle is not on level ground or the battery power has been interrupted, the range function may not operate correctly.
- The range may differ from the actual driving distance as it is an estimate of the available driving distance.
- The trip computer may not register additional fuel if less than 6 liters (2 gallon) of fuel are added to the vehicle.
- The range may vary significantly based on driving conditions, driving habits, and condition of the vehicle.

#### Distance to empty/ Average fuel economy/ Instant fuel economy



#### Distance to Empty (1)

- The distance to empty is the estimated distance the vehicle can be driven with the remaining fuel.
- If the estimated distance is below 1 km (1 mi.), the trip computer will display "----" as distance to empty.

### *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 trip computer may not register additional fuel if less than 6 liters (2 gallon) of fuel are added to the vehicle.
- The fuel economy and distance to empty may vary significantly based on driving conditions, driving habits, and condition of the vehicle.

#### **Average Fuel Economy (2)**

- The average fuel economy is calculated by the total driving distance and fuel consumption since the last average fuel economy reset.
- The average fuel economy can be reset both manually and automatically.

#### Manual reset

To clear the average fuel economy manually, press the OK button on the steering wheel for more than 1 second when the average fuel economy is displayed.

#### Automatic reset

To automatically reset the average fuel economy, select between "After Ignition" or "After Refueling" in the User Settings mode on the LCD display.

- After Ignition: When the engine has been OFF for 4 hours or longer the average fuel economy will reset automatically.
- After Refueling: The average fuel economy will reset automatically after adding 1.6 gallons (6 liters) of fuel or more and after driving speed exceeds 1 mph (1 km/h).

# *i* Information

The vehicle must be driven for a minimum of 300 meters (0.19 miles) since the last ignition key cycle before the average fuel economy will be recalculated.

#### **Instant Fuel Economy (3)**

 This mode displays the instantaneous fuel economy while driving.

#### Tripmeter/Average vehicle speed/ Elapsed time



#### Tripmeter (1)

- The tripmeter is the total driving distance since the last tripmeter reset.
- To reset the tripmeter, press the OK button on the steering wheel for more than 1 second when the tripmeter is displayed.

#### Average Vehicle Speed (2)

- The average vehicle speed is calculated by the total driving distance and driving time since the last average vehicle speed reset.
- To reset the average vehicle speed, press the OK button on the steering wheel for more than 1 second when the average vehicle speed is displayed.

# *i* Information

- The average vehicle speed is not displayed if the driving distance is less than 300 meters (0.19 miles) or the driving time is less than 10 seconds, after resetting the vehicle speed.
- The average vehicle speed will continue to be calculated and will start to decrease if the vehicle is stopped while the engine is still running (for example, when the vehicle is in traffic or stopped at a stop light.)

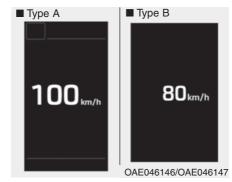
#### Elapsed Time (3)

- The elapsed time is the total driving time since the last elapsed time reset.
- To reset the elapsed time, press the OK button on the steering wheel for more than 1 second when the elapsed time is displayed.

# Information

The elapsed time will continue to be counted while the engine is still running (for example, when the vehicle is in traffic or stopped at a stop light.)

# Digital speedometer



This message shows the speed of the vehicle (km/h, MPH).

### Drive Info display



OAEPH047537L/OAEPH047538L

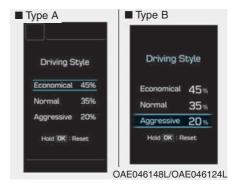
At the end of each driving cycle, the Driving Info message is displayed. This display shows the trip distance (1), average fuel economy (2), remaining vehicle range (3), and charging status (4).

This information is displayed for a few seconds when you turn off the vehicle, and then goes off automatically. The information is calculated for each time the vehicle is turned on

# Information

If sunroof open warning is displayed in the cluster, the Drive Info message will not be displayed.

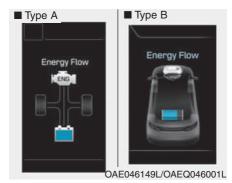
#### Driving style



The driving style is displayed when you are driving in ECO mode.

When you drive in SPORT mode, each driving category will be displayed with "--".

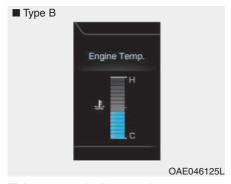
### Energy flow



The hybrid system informs the drivers its energy flow in various operating modes. While driving, the current energy flow is specified in 11 modes.

For more information, refer to HEV Energy Flow in the "Hybrid System Overview" provided in front of the owner's manual.

#### Engine coolant temperature



This gauge indicates the temperature of the engine coolant when the engine is running.

#### NOTICE

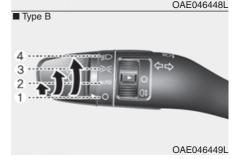
When the gauge indicator gets out of the normal range, toward the "H (Hot)" position, it indicates overheating of the engine. It may damage the engine.

Do not continue driving with the overheated engine. For further information, refer to "If the Engine Overheats" in the chapter 6.

# LIGHT Exterior lights

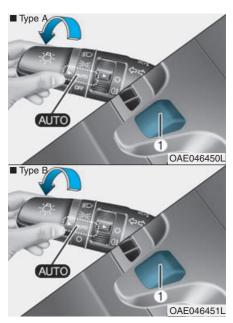
#### Lighting control





To operate the lights, turn the knob at the end of the control lever to one of the following positions:

- (1) OFF (O) position
- (2) AUTO light position
- (3) Position lamp position
- (4) Headlamp position



**AUTO light position** 

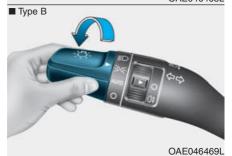
When the light switch is in the AUTO position, the position lamp and head-lamp will be turned ON or OFF automatically depending on the amount of light outside the vehicle.

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.

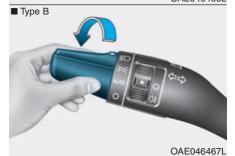




Position lamp position (=005)

The position lamp, license plate lamp and instrument panel lamp are turned ON.





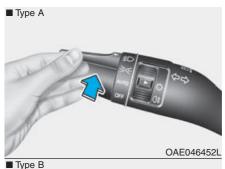
### **Headlamp position ( ⑤)**

The headlamp, position lamp, license plate lamp and instrument panel lamp are turned ON.

# i Information

The ignition switch must be in the ON position to turn on the headlamp.

### High beam operation





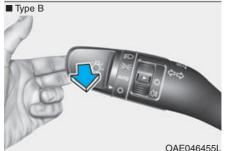
To turn on the high beam headlamp, push the lever away from you. The lever will return to its original position. The high beam indicator will light when the headlamp high beams are switched on.

To turn off the high beam headlamp, pull the lever towards you. The low beams will turn on.

### **A** WARNING

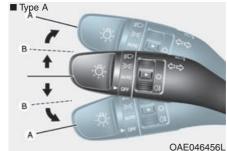
Do not use high beam when there are other vehicles approaching you. Using high beam could obstruct the other driver's vision.

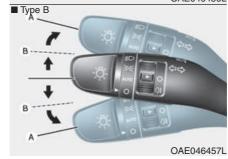




To flash the high beam headlamp, pull the lever towards you, then release the lever. The high beams will remain ON as long as you hold the lever towards you.

# 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.

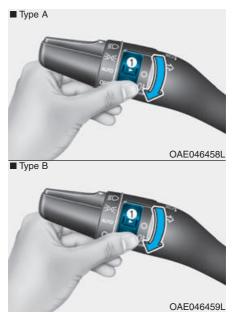
If an indicator stays on and does not flash or if it flashes abnormally, one of the turn signal bulbs may be burned out and will require replacement.

#### 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 information, refer to "LCD Display" in this chapter.

### Rear fog lamp (if equipped)



To turn on the rear fog lamp:

Position the light switch in the headlamp position, and then turn the light switch (1) to the rear fog lamp position. To turn the rear fog lamps off, do one of the following:

- Turn off the headlamp switch.
- Turn the light switch to the rear fog lamp position again.

#### 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 engine 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 road at night.

If necessary, to keep the lamps on when the engine 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.

# Headlamp delay function (if equipped)

If you place the ignition switch to the ACC or OFF position with the head-lamps ON, the headlamps (and/or position lamps) remain on for about 5 minutes. However, with the engine off if the driver's door is opened and closed, the headlamps (and/or position lamps) are turned off after 15 seconds.

The headlamps (and/or position lamps) can be turned off by pressing the lock button on the remote key or 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 headlamps will not be turned off.

You can activate or deactivate the Headlamp Delay function from the User Settings Mode on the LCD display. For more information, refer to "LCD Display" in this chapter.

#### 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 headlamp delay function does not turn off automatically. Therefore, It causes the battery to be discharged. In this case, make sure to turn off the lamp before getting out of the vehicle.

#### Daytime running light (DRL)

The Daytime Running Lights (DRL) can make it easier for others to see the front of your vehicle during the day, especially after dawn and before sunset.

The DRL system will turn the dedicated lamp OFF when:

- 1. The headlamps are in the ON position.
- 2. The engine is turned off.

#### Headlamp leveling device



#### Manual type

To adjust the headlamp beam level according to the number of the passengers and loading weight in the luggage area, turn the beam leveling switch.

The higher the number on the switch position, the lower the headlamp beam level. Always keep the headlight beam at the proper leveling position, or headlamps may dazzle other road users.

Listed below are examples of appropriate switch settings for varying loads. For loading conditions other than those listed, adjust the switch position to the most similar situation.

| Loading condition  | Switch position |
|--|-----------------|
| Driver only  | 0               |
| Driver + Front passenger   | 0               |
| Full passengers (including driver)                               | 1               |
| Full passengers (including driver) + Maximum permissible loading | 2               |
| Driver + Maximum permissible loading                             | 3               |

#### **Automatic type**

It automatically adjusts the headlamp beam level according to the number of passengers and loading weight in the luggage area.

It also adjusts to the appropriate headlamp beam level for various situations.

#### **A** WARNING

If the function does not work properly, we recommend that the system be inspected by an authorized HYUNDAI dealer. Do not attempt to inspect or replace the wiring yourself.

# Welcome system (if equipped) Welcome light (if equipped)



#### Puddle lamp (if equipped)

When all the doors (and tailgate) are closed and locked, the puddle lamp will come on for about 15 seconds if any of the below is performed.

- When the door unlock button is pressed on the remote key or smart key.
- When the button of the outside door handle is pressed with the smart key in possession.
- When the vehicle is approached with the smart key in possession. (if equipped)

Also, if the outside rearview mirror folding switch is in the AUTO position, the outside rearview mirror will unfold automatically.

#### Door handle lamp (if equipped)

When all the doors (and tailgate) are closed and locked, the door handle lamp will come on for about 15 seconds if any of the below is performed.

- When the door unlock button is pressed on the remote key or smart key.
- When the button of the outside door handle is pressed with the smart key in possession.
- When the vehicle is approached with the smart key in possession.

#### Headlamp and position lamp

When the headlamp (lamp switch in the headlamp or AUTO position) is on and all doors (and tailgate) are locked and closed, the position lamp and headlamp will come on for 15 seconds if/or any of the below is performed.

 When the door unlock button is pressed on the remote key or smart key. At this time, if you press the door lock or unlock button, the position lamp and headlamp will turn off immediately.

You can activate or deactivate the Welcome Light from the User Settings Mode on the LCD display. For more information, refer to "LCD Display" in this chapter.

#### Interior lamp

When the interior lamp switch is in the DOOR position and all doors (and tailgate) are closed and locked, the room lamp will come on for 30 seconds if any of the below is performed.

- When the door unlock button is pressed on the remote key or smart key.
- When the button of the outside door handle is pressed.

At this time, if you press the door lock or unlock button, the room lamp will turn off immediately.

#### **Interior lights**

#### NOTICE

Do not use the interior lights for extended periods when the engine is turned off or the battery will discharge.

#### Interior lamp AUTO cut

The interior lamps will automatically go off approximately 20 minutes after the engine is turned off and the doors are closed. If a door is opened, the lamp will go off 40 minutes after the engine is turned off. If the doors are locked by the remote key or smart key and the vehicle enters the armed stage of the theft alarm system, the lamps will go off five seconds later.

#### Front lamps



- (1) Front Map Lamp
- (2) Front Door Lamp
- (3) Front Room Lamp

### Front Map Lamp:

Press either 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 ( : ):

The front or rear room lamps come on when the front or rear doors are opened if the engine is running or not. When doors are unlocked by the remote key or 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 ignition switch 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 ignition switch in the ACC position or the OFF position, the front and rear lamps stay on for about 20 minutes.

#### Front room lamp

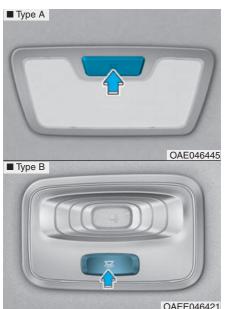
# · 杰:

Press the button to turn ON the room lamp for the front/rear seats.

#### • 😈

Press the button to turn OFF the room lamp for the front/rear seats.

### Rear lamps



Rear Room Lamp Switch ( \( \overline{\text{TK}} \): 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 engine is turned off.

#### Luggage compartment lamp



The luggage compartment lamp comes on when the tailgate is opened.

#### NOTICE

The luggage compartment lamp comes on as long as the tailgate is open. To prevent unnecessary charging system drain, close the tailgate securely after using the tailgate.

#### Vanity mirror lamp



Push the switch to turn the light on or off.

- 环 : The lamp will turn on if this button is pressed.
- C: 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.

#### Puddle lamp (if equipped)



#### Welcome light

When all doors (and tailgate) are closed and locked, the puddle lamp will come on for 15 seconds if the door is unlocked by the remote key/smart key or outside door handle button.

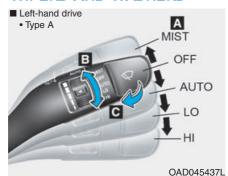
For more information, refer to "Welcome System" in this chapter.

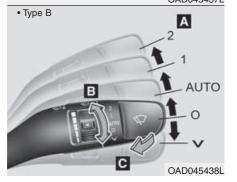
#### **Escort light**

When the ignition switch is in the LOCK/OFF position and the driver's door is opened, the puddle lamp will come on for 30 seconds. If the driver's door is closed within the 30 seconds, the puddle lamp will turn off after 15 seconds. If the driver's door is closed and locked, the puddle lamp will turn off immediately.

The Puddle Lamp Escort Light will turn on only the first time the driver's door is opened after the engine is turned off.

#### WIPERS AND WASHERS







### A: Wiper speed control

- · MIST / V − Single wipe
- · OFF / O Off
- · AUTO\* Auto control wipe INT / --- Intermittent wipe
- · LO / 1 Low wiper speed
- · HI / 2 High wiper speed
- \*: if equipped

B : Auto control wipe time adjustment

C: Wash with brief wipes

### Windshield wipers

Operates as follows when the ignition switch is in the ON position.

MIST (V): For a single wiping cycle, push the lever upward (or downward) and release.

The wipers will operate continuously if the lever is held in this position.

OFF (O): Wiper is not in operation.

INT (---): Wiper operates intermittently at the same wiping intervals. To vary the speed setting, turn the speed control knob (B).

AUTO: The rain sensor located on the upper end of the wind-shield 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).

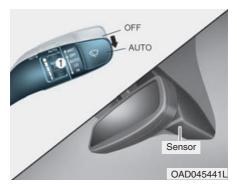
- LO (1): The wiper runs at a lower speed.
- HI (2): The wiper runs at a higher speed.

# **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 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 (1).

If the wiper switch is set in AUTO mode when the ignition switch is in the ON position, the wiper will operate once to perform a self-check of the system. Set the wiper to OFF position when the wiper is not in use.

#### **A** WARNING

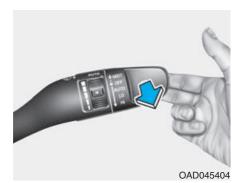
To avoid personal injury from the windshield wipers, when the engine is running and the windshield wiper switch is placed in the AUTO mode:

- Do not touch the upper end of the windshield glass facing the rain sensor.
- Do not wipe the upper end of the windshield glass with a damp or wet cloth.
- Do not put pressure on the windshield glass.

#### NOTICE

- When washing the vehicle, set the wiper switch in the OFF (O) position to stop the auto wiper operation. The wiper may operate and be damaged if the switch is set in the AUTO mode while washing the vehicle.
- Do not remove the sensor cover 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.

#### 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.

#### **A** 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.

### **A** 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 anti-freezing washer fluids in the winter season or cold weather.

# **DRIVER ASSIST SYSTEM**Rear view camera (if equipped)



The Rear View Camera will activate when the engine is running and the shift lever is in the R (Reverse) position.

This is a supplemental system that provides a view of the area behind the vehicle through the A/V display while the vehicle is in the R (Reverse) position.

### **A** WARNING

The rear camera display is not a safety device. It only serves to assist the driver in identifying objects directly behind the middle of the vehicle. The camera does NOT cover the complete area behind the vehicle.

#### **A** WARNING

- Never rely solely on the rear camera display when backingup.
- ALWAYS look around your vehicle to make sure there are no objects or obstacles before moving the vehicle in any direction to prevent a collision.
- Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.

#### **A** CAUTION

Do not use any cleanser containing acid or alkaline detergents when cleaning the lens. Use only a mild soap or neutral detergent, and rinse thoroughly with water.

# *i* Information

Always keep the camera lens clean. The camera may not work normally if the lens is covered with dirt or snow.

#### Rear parking assist system (if equipped)



The Rear Parking Assist System assists the driver during reverse movement of the vehicle by chiming if any object is sensed within approximately 120 cm (50 in) behind the vehicle.

This system is a supplemental system that senses objects within the range and location of the sensors, it cannot detect objects in other areas where sensors are not installed.

#### **A** WARNING

- ALWAYS look around your vehicle to make sure there are not any objects or obstacles before moving the vehicle in any direction to prevent a collision.
- Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.
- Be aware that some objects may not be visible on the screen or be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.

#### Operation of the Rear Parking Assist System

**Operating condition** 

 This system will activate when backing up with the ignition switch in the ON position. However, if the vehicle speed exceeds 5 km/h (3 mph), the system may not detect objects.

- If the vehicle speed exceeds 10 km/h (6 mph), the system will not warn you even though objects are detected.
- When more than two objects are sensed at the same time, the closest one will be recognized first.

Types of warning sound and indicator

#### Indicator Types of warning sound When an object is approximately 60 to 120 cm (24 to 47 in) from the rear bumper, the warning sound beeps intermittently. When an object is approximately 30 to 60 cm (12 to 24 in) from the rear bumper, the warning sound beeps more frequently. When an object is within approximately 30 cm (12 in) from the rear bumper, the warning sound beeps continuously.

#### NOTICE

- The indicator may differ from the illustration depending on objects or sensors status. If the indicator blinks, we recommend that you have your vehicle checked by an authorized HYUNDAI dealer.
- If the audible warning does not sound or if the buzzer sounds intermittently when shifting into R (Reverse) position, this may indicate a malfunction with the Parking Assist System. If this occurs, we recommend that you have your vehicle checked by an authorized HYUNDAI dealer as soon as possible.

# To turn off the Rear Parking Assist System (if equipped)



Push the button to turn off the Rear Parking Assist System. The indicator light on the button will turn on.

#### Non-operational conditions of Parking Assist System

The Rear Parking Assist System may not operate normally when:

- Moisture is frozen to the sensor.
- The sensor is covered with dirt or debris such as snow or ice, or the sensor cover is blocked.

There is a possibility of the Rear Parking Assist System malfunction when:

- Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
- Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
- Heavy rain or water spray is present.
- Wireless transmitters or mobile phones are present near the sensor.
- The sensor is covered with snow.
- Any non-factory equipment or accessories have been installed, or if the vehicle bumper height or sensor installation has been modified.

**Detecting range may decrease when:** 

- Outside air temperature is extremely hot or cold.
- Undetectable objects smaller than 1 m (40 inches) and narrower than 14 cm (6 inches) in diameter.

The following objects may not be recognized by the sensor:

- Sharp or slim objects such as ropes, chains or small poles.
- Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

#### Rear parking assist system precautions

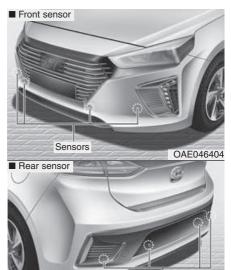
- The rear parking assist system may not operate consistently in some circumstances depending on the speed of the vehicle and the shapes of the objects detected.
- The rear parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.
- The sensor may not recognize objects less than 40 cm (15 in) from the sensor, or it may sense an incorrect distance. Use caution.
- When the sensor is blocked with snow, dirt, debris, or ice, the rear parking assist system may be inoperative until the snow or ice melts, or the debris is removed. Use a soft cloth to wipe debris away from the sensor.
- Do not push, scratch or strike the sensor with any hard objects that could damage the surface of the sensor. Sensor damage could occur.

 Do not spray the sensors or its surrounding area directly with a high pressure washer. Doing so may cause the sensors to fail to operate normally.

#### **A** WARNING

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants related to a Rear Parking Assist System. Always drive safely and cautiously.

# Parking Assist System (if equipped)



The Parking Assist System assists the driver during movement of the vehicle by chiming if any object is sensed within approximately 100 cm (40 in) in front and 120 cm (47 in) behind the vehicle.

Sensor

OAF046403

This system is a supplemental system that senses objects within the range and location of the sensors, it cannot detect objects in other areas where sensors are not installed.

#### **A** WARNING

- ALWAYS look around your vehicle to make sure there are no objects or obstacles before moving the vehicle in any direction to prevent a collision.
- Always pay close attention when the vehicle is driven close to objects, particularly pedestrians, and especially children.
- Be aware that some objects may not be visible on the screen or be detected by the sensors, due to the objects distance, size or material, all of which can limit the effectiveness of the sensor.

# Operation of the Parking Assist System



#### **Operating condition**

- This system will activate when the Parking Assist System button is pressed with the engine running.
- The Parking Assist System button turns on automatically and activates the Parking Assist System when you move the shift lever to the R (Reverse) position. However, if the vehicle speed exceeds 10 km/h (6 mph), the system will not warn you even though objects are detected, and if the vehicle speed exceeds 20 km/h (12 mph), the system will turn off automatically.

To turn on the system, press the Parking Assist System button.

 When more than two objects are sensed at the same time, the closest one will be recognized first.

Types of warning sound and indicator

cm (in)

| Distance<br>from object |       | Warning indicator    |                       |                             |
|-------------------------|-------|----------------------|-----------------------|-----------------------------|
|                         |       | When driving forward | When driving rearward | Warning sound               |
| 61 ~ 100<br>(24 ~39)    | Front |                      | -                     | Buzzer beeps intermittently |
| 61 ~ 120<br>(24 ~47)    | Rear  | -                    |                       | Buzzer beeps intermittently |
| 31 ~ 60<br>(12 ~24)     | Front |                      |                       | Buzzer beeps<br>frequently  |
|                         | Rear  | -                    |                       | Buzzer beeps<br>frequently  |
| 30<br>(12)              | Front |                      |                       | Buzzer sounds continuously  |
|                         | Rear  | -                    |                       | Buzzer sounds continuously  |

#### **NOTICE**

- The indicator may differ from the illustration depending on objects or sensors status. If the indicator blinks, we recommend that the system be checked by an authorized HYUNDAI dealer.
- If the audible warning does not sound or if the buzzer sounds intermittently when shifting into R (Reverse) position, this may indicate a malfunction with the Parking Assist System. If this occurs, we recommend that you have your vehicle checked by an authorized HYUNDAI dealer as soon as possible.

#### Non-operational conditions of Parking Assist System

Parking Assist System may not operate normally when:

- Moisture is frozen to the sensor.
- The sensor is covered with dirt or debris such as snow or ice, or the sensor cover is blocked.

There is a possibility of Parking Assist System malfunction when:

- Driving on uneven road surfaces such as unpaved roads, gravel, bumps, or gradient.
- Objects generating excessive noise such as vehicle horns, loud motorcycle engines, or truck air brakes can interfere with the sensor.
- Heavy rain or water spray is present.
- Wireless transmitters or mobile phones are present near the sensor.
- The sensor is covered with snow.
- Any non-factory equipment or accessories have been installed, or if the vehicle bumper height or sensor installation has been modified.

**Detecting range may decrease when:** 

- Outside air temperature extremely hot or cold.
- Undetectable objects smaller than 1 m and narrower than 14 cm in diameter.

The following objects may not be recognized by the sensor:

- Sharp or slim objects such as ropes, chains or small poles.
- Objects, which tend to absorb sensor frequency such as clothes, spongy material or snow.

# Parking assist system precautions

- The parking assist system may not operate consistently in some circumstances depending on the speed of the vehicle and the shapes of the objects detected.
- The parking assist system may malfunction if the vehicle bumper height or sensor installation has been modified or damaged. Any non-factory installed equipment or accessories may also interfere with the sensor performance.

- The sensor may not recognize objects less than 40 cm (15 in) from the sensor, or it may sense an incorrect distance. Use caution.
- When the sensor is blocked with snow, dirt, debris, or ice, the parking assist system may be inoperative until the snow or ice melts, or the debris is removed. Use a soft cloth to wipe debris away from the sensor.
- Do not push, scratch or strike the sensor with any hard objects that could damage the surface of the sensor. Sensor damage could occur.
- Do not spray the sensors or its surrounding area directly with a high pressure washer. Doing so may cause the sensors to fail to operate normally.

#### **A** WARNING

Your new vehicle warranty does not cover any accidents or damage to the vehicle or injuries to its occupants related to a Parking Assist System. Always drive safely and cautiously.

#### **AUTOMATIC CLIMATE CONTROL SYSTEM**

■ Left-hand drive



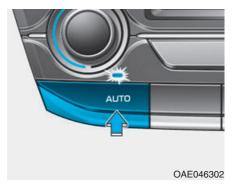
■ Right-hand drive



- 1. Driver's temperature control knob
- 2. Passenger's temperature control knob
- 3. AUTO (automatic control) button
- 4. OFF button
- 5. Front windshield defrost button
- 6. Rear window defrost button
- 7. Air conditioning button
- 8. Air intake control button
- 9. Fan speed control button
- 10. Mode selection button
- 11. Driver only button
- 12. SYNC button
- 13. Climate control information screen

OAE046300L/OAEPH047300R

# Automatic heating and air conditioning



1. Press the AUTO button.

The modes, fan speeds, air intake and air-conditioning will be controlled automatically according to the temperature setting.



2. Turn the temperature control knob to set the desired temperature.

### *i* Information

- To turn the automatic operation off, select any button of the following:
  - Mode selection button
  - Front windshield defrost button (Press the button one more time to deselect the front windshield defroster function. The 'AUTO' sign will illuminate on the information display once again.)
  - Fan speed control button

The selected function will be controlled manually while other functions operate automatically.

• For your convenience, use the AUTO button and set the temperature to 23°C (73°F).



# 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 engine.
- 2. Set the mode to the desired position.

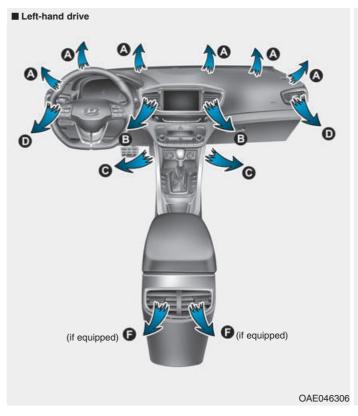
For improving the effectiveness of heating and cooling, select:

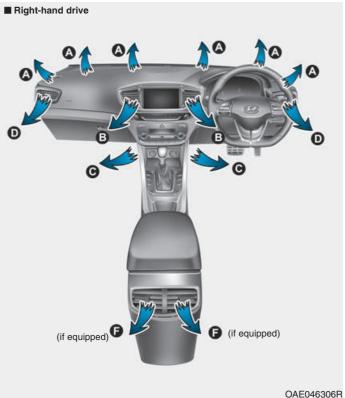
- Heating: ✓Cooling: ⋨
- 3.Set the temperature control to the desired position.

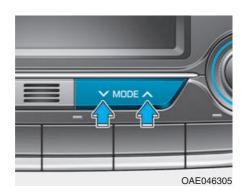
- 4. Set the air intake control to the outside (fresh) air position.
- 5.Set the fan speed control to the desired speed.
- 6.If air conditioning is desired, turn the air conditioning system on.

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:

■ MODE DOWN ( ∨ )



■ MODE UP ( ^ )



Face-Level (B, D, F)

Air flow is directed toward the upper body and face. Additionally, each outlet can be controlled to direct the air discharged from the outlet.



Bi-Level (B, C, D, F)

Air flow is directed towards the face and the floor.



Floor & Defrost (A, C, D, F)

Most of the air flow is directed to the floor and the windshield with a small amount directed to the side window defrosters.



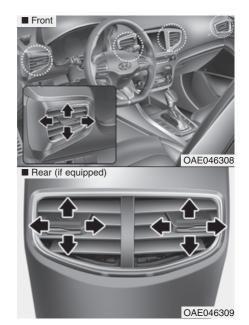
Floor-Level (A, C, D, E)

Most of the air flow is directed to the floor, with a small amount of the air being directed to the windshield and side window defrosters.



**Defrost-Level (A)** 

Most of the air flow is directed to the windshield with a small amount of air directed to the side window defrosters.

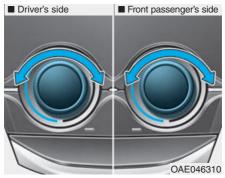


#### **Instrument panel vents**

The outlet vents can be opened or closed ( $\boxtimes$ ) 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



Turn the temperature control knob to set the desired temperature.



Adjusting the driver and passenger side temperature equally

 Press the "SYNC" button to adjust the driver and passenger side temperature equally.

The passenger side temperature will be set to the same temperature as the driver side temperature.

 Turn the driver side temperature control knob. The driver and passenger side temperature will be adjusted equally.

#### Adjusting the driver and passenger side temperature individually

Press the "SYNC" button again to adjust the driver and passenger side temperature individually. The button indicator will turn off.

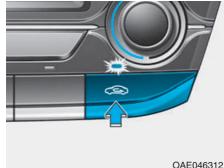
#### **Temperature unit conversion**

If the battery has been discharged or disconnected, the temperature mode display will reset to Centigrade.

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 Mode → Other Features → Temperature Unit.

#### Air intake control



This is used to select the outside (fresh) air position or recirculated air position.

To change the air intake control position, push the control button.

#### Recirculated air position



With the recirculated air position selected, air from the passenger compartment will be drawn through the heating system and heated or cooled according to the function selected.

#### Outside (fresh) air position



With the outside (fresh) air position selected. enters the vehicle from outside and is heated or cooled according to the function selected.

# Information

Using the system in the fresh air position is recommended.

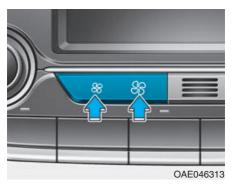
Prolonged operation of the heater in the recirculated air position (without air conditioning selected) may cause fogging of the windshield and side windows and the air within the passenger compartment may become stale.

In addition, prolonged use of the air conditioning with the recirculated air position selected will result in excessively dry air in the passenger compartment.

#### **A** WARNING

- Continued climate control system operation in the recirculated air position may allow humidity to increase inside the vehicle which may fog the glass and obscure visibility.
- Do not sleep in a vehicle with the air conditioning or heating system on. It may cause serious harm or death due to a drop in the oxygen level and/or body temperature.
- Continued climate control system operation in the recirculated air position can cause drowsiness or sleepiness, and loss of vehicle control. Set the air intake control to the outside (fresh) air position as much as possible while driving.

#### Fan speed control



The fan speed can be set to the desired speed by pushing the fan speed control button.

The higher the fan speed is, the more air is delivered.

Pressing the OFF button turns off the fan.

#### NOTICE

Operating the fan speed when the ignition switch is in the ON position could cause the battery to discharge. Operate the fan speed when the engine is running.

#### **Driver Only**



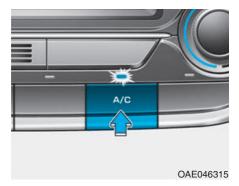
If you press the DRIVER ONLY button(\$\mathbf{S}^{DRIVER}\_{ONLY}) and the indicator light illuminates, air mostly blows in the direction of the driver's seat. However, some of the air may come out of other seating position ducts to keep indoor air pleasant.

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:

- Defrost on (the DRIVER ONLY button indicator is not turned off)
- 2) SYNC on
- 3) Adjusted front passenger seat temperature
- 4) DRIVER ONLY button re-push

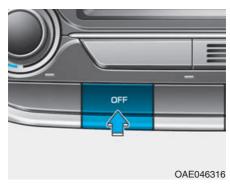
#### Air conditioning



Push the A/C button to turn the air conditioning system on (indicator light will illuminate).

Push the button again to turn the air conditioning system off.

#### OFF mode



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 ignition switch 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 😝 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 or or mode to the

#### **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.
- Air for the heating/cooling system is drawn in through the grilles just ahead of the windshield. Care should be taken that these are not blocked by leaves, snow, ice or other obstructions.
- 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 R1234yf refrigerant.

- 1. Start the engine. Push the air conditioning button.
- 2. Set the mode to the 🔀 position.
- 3. Set the air intake control to the outside air or recirculated air position.
- 4. Adjust the fan speed control and temperature control to maintain maximum comfort.

# **i** Information

Your vehicle is filled with R-134a or R-1234yf according to the regulation in your country at the time of production. You can find out which air conditioning refrigerant is applied to your vehicle on the label located inside of the hood.

#### NOTICE

- The refrigerant system should only be serviced by trained and certified technicians to insure proper and safe operation.
- The refrigerant system should be serviced in a well-ventilated place.
- The air conditioning evaporator (cooling coil) shall never be repaired or replaced with one removed from a used or salvaged vehicle and new replacement MAC evaporators shall be certified (and labeled) as meeting SAE Standard J2842.

# Information

- When using the air conditioning system, monitor the temperature gauge closely while driving up hills or in heavy traffic when outside temperatures are high. Air conditioning system operation may cause engine overheating. Continue to use the fan but turn the air conditioning system off if the temperature gauge indicates engine overheating.
- When opening the windows in humid weather, air conditioning may create water droplets inside the vehicle. Since excessive water droplets may cause damage to electrical equipment, air conditioning should only be used with the windows closed.

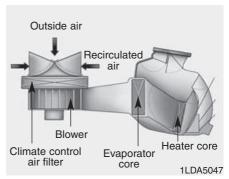
# Air conditioning system operation tips

- 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.
- Use air conditioning to reduce humidity and moisture inside the vehicle on rainy or humid days.
- During air conditioning system operation, you may occasionally notice a slight change in engine speed as the air conditioning compressor cycles. This is a normal system operation characteristic.
- Use the air conditioning system every month only for a few minutes to ensure maximum system performance.
- When using the air conditioning system, you may notice clear water dripping (or even puddling) on the ground under the passenger side of the vehicle. This is a normal system operation characteristic.

- Operating the air conditioning system in the recirculated air position provides maximum cooling, however, continual operation in this mode may cause the air inside the vehicle to become stale.
- During cooling operation, you may occasionally notice a misty air flow because of rapid cooling and humid air intake. This is a normal system operation characteristic.

#### **System maintenance**

#### Climate control air filter



The climate control air filter installed behind the glove box filters the dust or other pollutants that come into the vehicle from the outside through the heating and air conditioning system. If dust or other pollutants accumulate in the filter over a period of time, the air flow from the air vents may decrease, resulting in moisture accumulation on the inside of the windshield even when the outside (fresh) air position is selected. If this happens, we recommend that the climate control air filter be replaced by 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, we recommend that the system be 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, we recommend that the system be inspected by an authorized HYUNDAI dealer.

#### **A** WARNING

Vehicles equipped with R-134a



Because the refrigerant is at very high pressure, the air conditioning system should only be serv-

iced by trained and certified technicians. It is important that the correct type and amount of oil and refrigerant is used.

Otherwise, it may cause damage to the vehicle and personal injury.

## **A** WARNING

## Vehicles equipped with R-1234yf

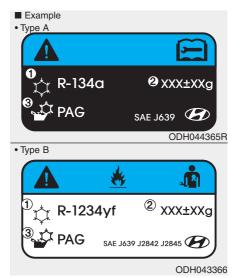


Because the refrigerant is mildly inflammable at very high pressure, the air conditioning system should only be serviced by trained and certified technicians. It is important that the

correct type and amount of oil and refrigerant is used.

Otherwise, it may cause damage to the vehicle and personal injury.

## Air Conditioning refrigerant label



The actual Air Conditioning refrigerant label in the vehicle may differ from the illustration.

Each symbols and specification on air conditioning refrigerant label means as below:

- 1. Classification of refrigerant
- 2. Amount of refrigerant
- Classification of Compressor lubricant

You can find out which air conditioning refrigerant is applied to your vehicle on the label located inside of the hood.

## WINDSHIELD DEFROSTING AND DEFOGGING

## **A** WARNING

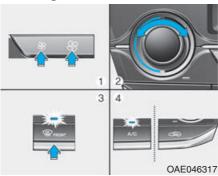
### Windshield heating

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 position and fan speed control knob or button to lower speed.

- For maximum defrosting, set the temperature control to the extreme right/hot position and the fan speed control to the highest speed.
- 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 rear 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.

## Automatic climate control system

## To defog inside windshield

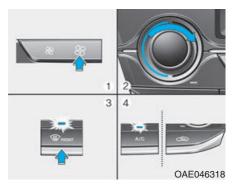


- 1. Select the desired fan speed.
- 2. Select the desired temperature.
- 3. Press the defroster button ( ).
- The air-conditioning will turn on according to the detected ambient temperature, outside (fresh) air position and higher fan speed will be selected automatically.

If the air-conditioning, outside (fresh) air position and higher fan speed are not selected automatically, adjust the corresponding button or knob manually.

If the mosition is selected, lower fan speed is controlled to higher fan speed.

#### To defrost outside windshield



- 1. Set fan speed to the highest position.
- 2. Set temperature to the extreme hot (HI) position.
- 3. Press the defroster button ( ).
- The air-conditioning will turn on according to the detected ambient temperature and outside (fresh) air position will be selected automatically.

If the mosition is selected, lower fan speed is controlled to higher fan speed.

## **Defogging logic (if equipped)**

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 mostions. To cancel or return the defogging logic, do the following.

- 1. Turn the ignition switch to the ON position.
- 2. Press the defroster button ( ).
- While pressing the air conditioning button (A/C), press the air intake control button at least 5 times within 3 seconds.

The climate control information screen will blink 3 times. It indicates that the defogging logic is canceled or returned to the programmed status.

If the battery has been discharged or disconnected, it resets to the defog logic status.

## Auto defogging 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.

## *i* Information

The auto defogging system may not operate normally, when the outside temperature is below -10 °C.



When the Auto Defogging System operates, the indicator will illuminate.

If high levels of moisture are sensed in the vehicle, the Auto Defogging System will operate in the following order:

Step 1: Outside air position

Step 2: Operating the air conditioning

Step 3 : Blowing air toward the windshield

Step 4 : Increasing air flow toward the windshield

If the air conditioning is off or recirculated air position is manually selected while Auto Defogging System is ON, the Auto Defogging System Indicator will blink 3 times to signal that the manual operation has been canceled.

## To cancel or reset the Auto Defogging System

Press the front windshield defroster button for 3 seconds when the ignition switch is in the ON position. When the Auto Defogging System is canceled, the ADS OFF symbol will blink 3 times and ADS OFF will be displayed on the climate control information screen.

When the Auto Defogging System is reset, the ADS OFF symbol will blink 6 times without a signal.

## Information

- When the air conditioning is turned on by Auto defogging system, if you try to turn off the air conditioning, the indicator will blink 3 times and the air conditioning will not be turned off.
- For efficiency, do not select recirculated air position while the Auto defogging system is operating.

#### NOTICE

Do not remove the sensor cover located on the upper end of the windshield glass.

Damage to system parts could occur and may not be covered by your vehicle warranty.

#### **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.

## *i* Information

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 engine is running.

- 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 Engine Start/Stop button is in the OFF position.

## CLIMATE CONTROL ADDITIONAL FEATURES

## Automatic ventilation (if equipped)

### For Europe

To increase cabin air quality and reduce windshield misting, air recirculation mode switches off automatically after about 5 to 30 minutes, depending on outside temperature, and the air intake will change to outside (fresh) mode.

To cancel or set the automatic ventilation feature, select Face level mode and while pressing the A/C button, press the air intake control button 5 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.

## Except Europe

To increase cabin air quality and reduce windshield misting, air recirculation mode switches off automatically after about 30 minutes, when outside temperature is low, and the air intake will change to outside (fresh) mode.

To cancel or set the automatic ventilation feature, select Face level mode and while pressing the A/C button, press the air intake control button 5 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.

## Clean air (if equipped)

When the ignition switch is in the ON position, the clean air function turns on automatically.

Also, the clean air function turns off automatically, when the ignition switch is in the OFF position.

## Sunroof inside air recirculation (if equipped)

If the sunroof opens while the heater or Air Conditioning system operates, the outside (fresh) air will be selected automatically for ventilating the car. Then, if you select the recirculated air position, the outside (fresh) air will be selected automatically after 3 minutes.

If you close the sunroof, the intake mode will be changed to the previous selected mode.

#### STORAGE COMPARTMENT

## **A** 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.

## **A** 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 armrest then lift the lid.

#### Glove box



To open: Pull the lever (1).

## **A** 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.

## **Sunglass 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 sunglass holder is closed while driving.

## **A** WARNING

- Do not keep objects except sunglasses inside the sunglass 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 rear view mirror of the vehicle can be blocked by an open sunglass holder.
- Do not put the glasses forcibly into a sunglass holder. It may cause personal injury if you try to open it forcibly when the glasses are jammed in holder.

## Multi box (if equipped)



Use the multi box to keep small objects.

#### **A** WARNING

Do not keep objects that can be thrown from the multi box and severely injure passengers in the vehicle in the event of a sudden stop or an accident.

# INTERIOR FEATURES Ashtray (if equipped)



To use the ashtray, open the cover.

To clean the ashtray:

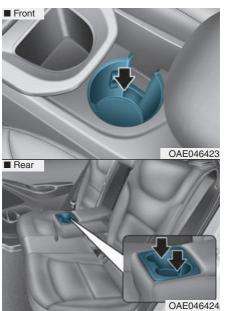
The plastic receptacle should be removed by lifting the plastic ashtray receptacle upward after turning the cover counterclockwise and pulling it out.

## **A** WARNING

## Ashtray use

Putting lit cigarettes or matches in an ashtray with other combustible materials may cause a fire.

## **Cup holder**



Cups may be placed in the cup holders.

### Rear

Pull the armrest down to use the cup holders.

## **A** WARNING

- Avoid abrupt starting and braking when the cup holder is in use to prevent spilling your drink. If hot liquid spills, you could be burned. Such a burn to the driver could cause loss of vehicle control resulting in an accident.
- Do not place uncovered or unsecured cups, bottles, cans, etc., in the cup holder containing hot liquid while the vehicle is in motion. Injuries may result in the event of a sudden stop or collision.
- Only use soft cups in the cup holders. Hard objects can injure you in an accident.

## **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 using hot temperatures. This may damage the cup holder.

### **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). Use the ticket holder (4) to hold tickets.

## *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(Watts) with the engine running.

## **A 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 engine is running and remove the accessory plug after use.
   Using the accessory plug for prolonged periods of time with the engine off could cause the battery to discharge.
- Only use 12V electric accessories which are less than 180 W(Watts) 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.

## Wireless cellular phone charging system (if equipped)



There is a wireless cellular phone charger inside the front console.

The system is available when all doors are closed, and when the ignition switch is in the ACC/ON position.

## To charge a cellular phone

The wireless cellular phone charging system charges only the Qi-enabled cellular phones (  $\mathbf{Q}^{\mathbf{J}}$  ). Read the label on the cellular phone accessory cover or visit your cellular phone manufacturer's website to check whether your cellular phone supports the Qi technology.

The wireless charging process starts when you put a Qi-enabled cellular phone on the wireless charging unit.

- 1. Remove other items, including the smart key, from the wireless charging unit. If not, the wireless charging process may be interrupted.
- The indicator illuminates in orange during the charging process. The indicator color changes to green, when the charging process is completed.
- 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 "LCD Modes" in this chapter.

Slightly change the cellular phone position, when the cellular phone is not being charged. Make sure that the indicator illuminates in orange. The indicator color may not change to green depending on the cellular phone type, even though the charging process has been completed.

The indicator blinks orange for 10 seconds when there is a malfunction with 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 you do not remove the cellular phone from the wireless charging unit, when the front door is open and the ignition switch is in the LOCK/OFF position.

#### NOTICE

- The wireless cellular phone charging system may not support certain cellular phones, which are not verified for the Qi specification (Q)).
- Locate your cell phone well in the middle of the wireless cellular phone charging system. Even when your cell phone locates slightly to one side, the charging speed may decrease.
- The wireless charging process may temporarily stop, when a smart key function operates (i.e. starting the engine, opening the doors, closing the doors).
- For certain cell phones, the indicator color may not change to green, even when the wireless charging process is properly completed.
- The wireless charging process may temporarily stop, when temperature abnormally increases inside the wireless cellular 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 cellular phone charging system and a cellular phone.

## **Cigarette lighter (if equipped)**



To use the cigarette lighter, the ignition switch must be in the ACC or ON position.

Push the cigarette lighter all the way into its socket. When the element is heated, the lighter will pop out to the "ready" position.

We recommend that you use replacement parts from an authorized HYUNDAI dealer.

### **A** WARNING

- Do not hold the lighter in after it is already heated because it will overheat.
- If the lighter does not pop out within 30 seconds, remove it to prevent overheating.
- Do not insert foreign objects into the socket of the cigarette lighter. It may damage the cigarette lighter.

### NOTICE

Only a genuine HYUNDAI lighter should be used in the cigarette lighter socket. The use of plug-in accessories (shavers, hand-held vacuums, and coffee pots, etc.) may damage the socket or cause electrical failure.

#### 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 **[SETUP]** button on the audio system → 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 Navigation system → Select [Date/Time].

- GPS time: Displays time according to the received GNSS time.
- 24-hour: Switches to 12 hour or 24 hour.

## **Clothes hanger (if equipped)**



These hangers are not designed to hold large or heavy items.

## **A** 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.

## **A** WARNING

Do not overlay additional mats or liners over the floor mats. If using All Weather mats, remove the carpeted floor mats before installing them. Only use floor mats designed to connect to the anchors.

## **A** WARNING

The following must be observed when installing ANY floor mat to the vehicle.

- Ensure that the floor mats are securely attached to the vehicle's floor mat anchor(s) before driving the vehicle.
- Do not use ANY floor mat that cannot be firmly attached to the vehicle's floor mat anchors.
- Do not stack floor mats on top of one another (e.g. all-weather rubber mat on top of a carpeted floor mat). Only a single floor mat should be installed in each position.

IMPORTANT - Your vehicle was manufactured with driver's side floor mat anchors that are designed to securely hold the floor mat in place. To avoid any interference with pedal operation, HYUNDAI recommends that the HYUNDAI floor mat designed for use in your vehicle be installed.

## Luggage net (holder) (if equipped)



To keep items from shifting in the cargo area, you can use the four holders located in the cargo area to attach the luggage net.

If necessary, we recommend that you contact your authorized HYUNDAI dealer to obtain a luggage net.

## **A** CAUTION

To prevent damage to the goods or the vehicle, care should be taken when carrying fragile or bulky objects in the luggage compartment.

## A 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.

## Multimedia System

| Multimedia system                         | 4-2  |
|---|------|
| AUX, USB and iPod® port                   |      |
| Antenna                                   | 4-2  |
| Steering wheel audio controls             | 4-3  |
| Bluetooth® Wireless Technology hands-free | 4-4  |
| Audio / Video / Navigation system (AVN)   | 4-5  |
| How vehicle radio works                   | 4-5  |
| AUDIO (With Touch Screen)                 | 4-8  |
| Feature of your audio                     | 4-9  |
| Radio                                     |      |
| Media                                     | 4-18 |
| Phone                                     | 4-32 |
| Setup                                     | 4-40 |
| Declaration of conformity                 | 4-42 |
| CE for EU                                 |      |
| NCC for Taiwan                            |      |

### **MULTIMEDIA SYSTEM**

## **i** Information

- If you install an aftermarket HID headlamp, 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.

## AUX, USB and iPod® port



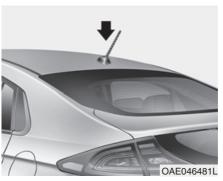
You can use an AUX port to connect audio devices and an USB port to plug in an USB and an iPod® port.

## *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.

#### Antenna

## Roof antenna (Type A)

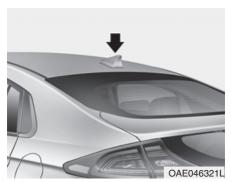


The roof antenna receives both AM and FM broadcast signals.
Rotate the roof antenna in a counter-clockwise direction to remove it.
Rotate it in a clockwise direction to reinstall it.

#### NOTICE

- Before entering a place with a low height clearance or a car wash, remove the antenna by rotating it counterclockwise. If not, the antenna may be damaged.
- When reinstalling your antenna, it is important that it is fully tightened and adjusted to the upright position to ensure proper reception.

## Shark fin antenna (Type B)

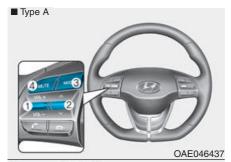


The shark fin antenna receives transmitted data. (for example: AM/FM, DAB, GPS/GNSS)

#### NOTICE

Avoid adding metallic coatings such as Ni, Cd, and so on. These can degrade the received AM and FM broadcast signals.

## Steering wheel audio controls (if equipped)





The steering wheel audio control switches are installed for your convenience.

#### NOTICE

Do not operate audio remote control buttons simultaneously.

## **VOLUME (VOL + / - ) (1)**

- Move the VOLUME toggle switch up to increase volume.
- Move the VOLUME toggle switch down to decrease volume.

## SEEK/PRESET ( $\wedge$ / $\vee$ ) (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* ( **♀** ) (4)

- Press the button to mute the sound.
- Press the button again to activate the sound.

## Information

Detailed information for audio control buttons are described in the following pages in this chapter.

## **Bluetooth®** Wireless Technology hands-free





You can use the phone wirelessly by using the *Bluetooth®* Wireless Technology.

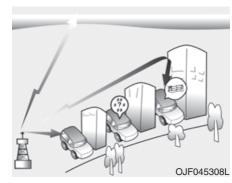
- (1) Call / Answer button
- (2) Call end button
- (3) Microphone
- Audio: For detailed information, refer to "AUDIO" in this chapter.
- AVN: Detailed information for the Bluetooth<sup>®</sup> Wireless Technology hands-free is described in the manual supplied separately.

## Audio / Video / Navigation system (AVN) (if equipped)

Detailed information for the AVN system is described in a separately supplied manual.

## How vehicle radio works

## FM reception

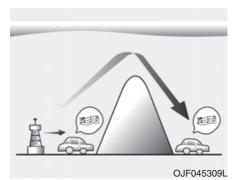


AM and FM radio signals are broadcast from transmitter towers located around your city. They are intercepted by the radio antenna on your vehicle. This signal is then received by the radio and sent to your vehicle speakers.

When a strong radio signal has reached your vehicle, the precise engineering of your audio system ensures the best possible quality reproduction. However, in some cases the signal coming to your vehicle may not be strong and clear.

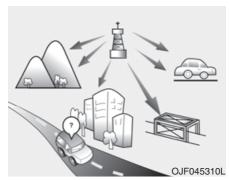
This can be due to factors, such as the distance from the radio station, closeness of other strong radio stations or the presence of buildings, bridges or other large obstructions in the area.

## AM (MW, LW) reception

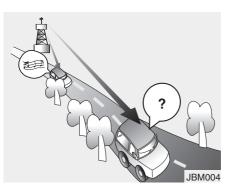


AM broadcasts can be received at greater distances than FM broadcasts. This is because AM radio waves are transmitted at low frequencies. These long, low frequency radio waves can follow the curvature of the earth rather than travelling straight out into the atmosphere. In addition, they curve around obstructions so that they can provide better signal coverage.

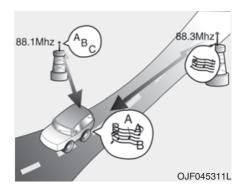
#### FM radio station



FM broadcasts are transmitted at high frequencies and do not bend to follow the earth's surface. Because of this, FM broadcasts generally begin to fade at short distances from the station. Also, FM signals are easily affected by buildings, mountains, or other obstructions. These can result in certain listening conditions which might lead you to believe a problem exists with your radio. The following conditions are normal and do not indicate radio trouble:



- Fading As your vehicle moves away from the radio station, the signal will weaken and sound will begin to fade. When this occurs, we suggest that you select another stronger station.
- Flutter/Static Weak FM signals or large obstructions between the transmitter and your radio can disturb the signal causing static or fluttering noises to occur. Reducing the treble level may lessen this effect until the disturbance clears.



- Station Swapping As a FM signal weakens, another more powerful signal near the same frequency may begin to play. This is because your radio is designed to lock onto the clearest signal. If this occurs, select another station with a stronger signal.
- Multi-Path Cancellation Radio signals being received from several directions can cause distortion or fluttering. This can be caused by a direct and reflected signal from the same station, or by signals from two stations with close frequencies. If this occurs, select another station until the condition has passed.

## Using a cellular phone or a twoway radio

When a cellular phone is used inside the vehicle, noise may be produced from the audio system. This does not mean that something is wrong with the audio equipment. In such a case, use the cellular phone at a place as far as possible from the audio equipment.

#### NOTICE

When using a communication system such as a cellular phone or a radio set inside the vehicle, a separate external antenna must be fitted. When a cellular phone or a radio set is used with an internal antenna alone, it may interfere with the vehicle's electrical system and adversely affect safe operation of the vehicle.

## **A** WARNING

Do not use a cellular phone while driving. Stop at a safe location to use a cellular phone.

#### **iPod®**

iPod® is a registered trademark of Apple Inc.

## Bluetooth® Wireless Technology

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by HYUNDAI is under license.

Other trademarks and trade names are those of their respective owners.



## **AUDIO (With Touch Screen)**

■ Type A



(With Bluetooth® Wireless Technology)

G2H4G0000EE

#### **Feature of Your Audio**

#### Head unit



\* The actual features in the vehicle may differ from the illustration.

### (1) LCD screen

• Tap the screen to select a button.

## (2) POWER/VOL knob

- Turn to adjust the volume.
- · Press to turn the device on or off.

#### (3) **RADIO**

- Start FM, AM or DAB\* radio.
- \* if equipped

#### (4) MEDIA

- Select USB(iPod®), Bluetooth® Audio, AUX and My Music.
- Display the media menu when two or more media are connected or when the [MEDIA] button is pressed in media mode.

### (5) **SEEK/TRACK**

- Search for next station in FM or AM radio mode.
- Search for next station in DAB\* radio mode.
- Change the current song in media mode.
- \* if equipped

## (6) **RESET**

• Shutdown and restart the system.



#### (7) PHONE

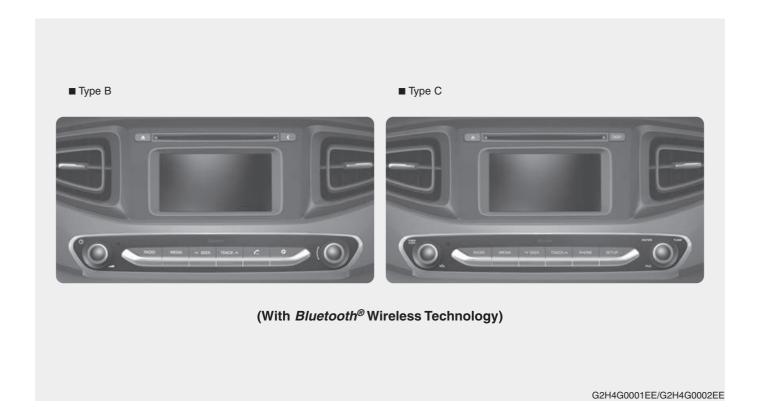
Start Bluetooth® Phone mode.

#### (8) **SETUP**

 Access Display, Sound, Date/Time, Bluetooth, System, Screensaver and Display Off settings.

#### (9) **TUNE** knob

- Turn to navigate through the stations/songs list.
- · Press to select an item.



#### **Feature of Your Audio**

#### Head unit



\* The actual features in the vehicle may differ from the illustration.

## (1) LCD screen

• Tap the screen to select a button.

## (2) POWER/VOL knob

- Turn to adjust the volume.
- Press to turn the device on or off.

#### (3) **RADIO**

• Start FM, AM.

### (4) MEDIA

- Select Disc, USB(iPod®), Bluetooth® Audio, AUX and My Music.
- Display the media menu when two or more media are connected or when the [MEDIA] button is pressed in media mode.

#### (5) **SEEK/TRACK**

- Search for next station in FM or AM radio mode.
- Change the current song in media mode.

#### (6) RESET

• Shutdown and restart the system.



## (7) EJECT

• Eject the inserted disc.

### (8) Disc slot

· Insert a disc.

## (9) **DISP**

• Turn the display on or off.

#### ■ Type B



■ Type C



#### (10) **PHONE**

• Start Bluetooth® Phone mode.

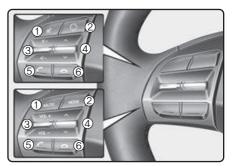
## (11) **SETUP**

 Access Display, Sound, Date/Time, Bluetooth, System, Screensaver and Display Off settings.

## (12) TUNE knob

- Turn to navigate through the stations/songs list.
- · Press to select an item.

## Steering wheel remote control



\* The actual features in the may differ from the illustration.

### (1) **MUTE**

Press to mute audio output.

### (2) **MODE**

- Press the button to change the mode in the following order: Radio
   Media.
- Press and hold the button to turn off. (with Type B, Type C)

#### (3) VOLUME

• Press to adjust the volume.

#### (4) UP/DOWN

- Press the button in radio mode to search Presets.
- Press and hold the button in radio mode to search frequencies.
- Press the button in media mode to change the current song.
- Press and hold the button in media mode to quick search through songs.

## (5) **CALL**

- Pressing the button
  - If not in Bluetooth® Handsfree mode or receiving a phone call.

First press: Display Dial Number screen.

Second press: Automatically display the most recently Dialed Call number.

Third press: Dial the phone number entered.

- Press in the Incoming Call notification screen to accept the phone call.
- Press in Bluetooth® Handsfree mode to switch to the waiting call.

- Pressing and holding the button
  - If not in Bluetooth® Handsfree mode or receiving a phone call, the most recently Dialed Call number is dialed.
  - Press in Bluetooth® Handsfree mode to transfer the call to your cell phone.
  - Press in cell phone mode to switch to Bluetooth® Handsfree mode.

#### (6) **END**

- Press in Bluetooth® Handsfree mode to end the phone call.
- Press in the incoming call screen to reject the call.

## **A** WARNING

- Do not stare at the screen while driving. Staring at the screen for prolonged periods of time could lead to traffic accidents.
- Do not disassemble, assemble, or modify the audio system. Such acts could result in accidents, fire, or electric shock.
- Using the phone while driving may lead to a lack of attention of traffic conditions and increase the likelihood of accidents. Use the phone feature after parking the vehicle.
- Heed caution not to spill water or introduce foreign objects into the device. Such acts could lead to smoke, fire, or product malfunction.

(Continued)

## (Continued)

- Please refrain from use if the screen is blank or no sound can be heard as these signs may indicate product malfunction. Continued use in such conditions could lead to accidents (fires, electric shock) or product malfunctions.
- Do not touch the antenna during thunder or lightening as such acts may lead to lightning induced electric shock.
- Do not stop or park in parking-restricted areas to operate the product. Such acts could lead to traffic accidents.
- Use the system with the vehicle ignition turned on.
   Prolonged use with the ignition turned off could result in battery discharge.

### **A** WARNING

Driving while distracted can result in a loss of vehicle control that may lead to an accident, severe personal injury. and death. The driver's primary responsibility is in the safe and legal operation of a vehicle, and use of any handheld devices. other equipment, or vehicle systems which take the driver's eves, attention and focus away from the safe operation of a vehicle or which are not permissible by law should never be used during operation of the vehicle.

#### NOTICE

- Operating the device while driving could lead to accidents due to a lack of attention to external surroundings. First park the vehicle before operating the device.
- Adjust the volume to levels that allow the driver to hear sounds from outside of the vehicle. Driving in a state where external sounds cannot be heard may lead to accidents.
- Pay attention to the volume setting when turning the device on. A sudden output of extreme volume upon turning the device on could lead to hearing impairment. (Adjust the volume to a suitable levels before turning off the device.)
- If you want to change the position of device installation, please inquire with your place of purchase or service maintenance center. Technical expertise is required to install or disassemble the device.

(Continued)

#### (Continued)

- Turn on the car ignition before using this device. Do not operate the audio system for long periods of time with the ignition turned off as such operations may lead to battery discharge.
- Do not subject the device to severe shock or impact. Direct pressure onto the front side of the monitor may cause damage to the LCD or touch screen.
- When cleaning the device, make sure to turn off the device and use a dry and smooth cloth. Never use tough materials, chemical cloths, or solvents (alcohol, benzene, thinners, etc.) as such materials may damage the device panel or cause color/quality deterioration
- Do not place beverages close to the audio system. Spilling beverages may lead to system malfunction.

(Continued)

#### (Continued)

- In case of product malfunction, please contact your place of purchase or After Service center.
- Placing the audio system within an electromagnetic environment may result in noise interference.

#### Information on status icons

Icons showing audio status are shown in the upper-right corner of the screen.

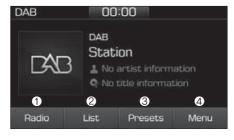
| Icon        |  | Description  |  |  |  |  |  |
|-------------|--|--|--|--|--|--|--|
| *           | Mute   | Mute engaged   |  |  |  |  |  |
| <u>    </u> | Battery  | Remaining battery life of a connected Bluetooth® device                    |  |  |  |  |  |
| <b>®</b> \  | Handsfree +<br>Audio stream-<br>ing connection | Bluetooth® Handsfree call and audio streaming available                    |  |  |  |  |  |
| (3)         | Handsfree connection                           | Bluetooth® Handsfree call available  |  |  |  |  |  |
| 18          | Bluetaooth® audio streaming                    | Bluetooth® audio streaming available                                       |  |  |  |  |  |
| C.          | Downloading contacts                           | Downloading contacts through Bluetooth® wireless communications            |  |  |  |  |  |
| C±          | Downloading call history                       | Downloading call history through Bluetooth® wireless communications        |  |  |  |  |  |
| C           | Line busy                                      | Phone call in progress   |  |  |  |  |  |
| <b>*</b>    | Mute mic                                       | Mic muted during a call (caller cannot hear your voice)                    |  |  |  |  |  |
| <b>₽</b> Ψ. | Phone signal strength                          | Display the phone signal strength for a cell phone connected by Bluetooth® |  |  |  |  |  |
| 4 16        |  |  |  |  |  |  |  |

#### **Radio**

#### FM/AM (with RDS)



## DAB (if equipped)



#### (1) Radio

Switch between FM, AM and DAB\*.

- \* if equipped.
- (2) List

View all available stations.

(3) Presets

View all presets.

(4) Menu

Navigate to the menu screen.

Switching between FM, AM and DAB\*

- Press the [RADIO] button on the audio system to switch between FM, AM and DAB\*.
- Press the [Radio] on the screen to switch between FM, AM and DAB\*.
- \* if equipped

## **Searching stations**

Press the **[SEEK/TRACK]** button to search stations.

#### List

A list of all available stations in the vehicle's current location is displayed. Press the desired station.

Favourite stations can be saved to [Presets] by pressing the [+].

#### **Presets**

Save up to 40 frequently used stations. To listen to a preset, press the desired station list.

Press and hold the desired slot from 1 through 40. This saves the current station in the selected slot.

If the slot is empty, simply pressing saves the station to the slot.

#### Menu

Press the [Menu], and select the desired function.

- Traffic Announcement (TA): Enable or disable Traffic Announcements.
- Scan: All available stations are played for five seconds each.
- Sound Settings: Audio sound settings can be changed.

## FM/AM (without RDS)



(1) Band

Switch between FM, AM.

(2) Presets

View all presets.

(3) List

View all available stations.

(4) Menu

Navigate to the menu screen.

#### Switching between FM, AM

- Press the [RADIO] button on the audio system to switch between FM, AM.
- Press the [Band] on the screen to switch between FM, AM.

### **Searching stations**

Press the **[SEEK/TRACK]** button to search stations.

#### List

A list of all available stations in the vehicle's current location is displayed. Press the desired station.

Favourite stations can be saved to [Presets] by pressing the [save].

#### **Presets**

Save up to 40 frequently used stations. To listen to a preset, press the desired station list.

Press and hold the desired slot from 1 through 40. This saves the current station in the selected slot.

If the slot is empty, simply pressing saves the station to the slot.

#### Menu

Press the [Menu], and select the desired function.

- Scan: All available stations are played for five seconds each.
- Sound Settings: Audio sound settings can be changed.

#### Media

- i Information Using the Discs
- Do not clean discs with chemical solutions, such as record sprays, antistatic sprays, antistatic liquids, benzene, or thinners.
- After using a disc, put the disc back in its original case to prevent disc scratches.
- Hold discs by their edges or within the center hole to prevent damages to disc surfaces.
- Do not introduce foreign substances into the disc insert/eject slot. Introducing foreign substances could damage the device interior.
- Do not insert two discs simultaneously. (Continued)

#### (Continued)

- When using CD-R/CD-RW discs, differences in disc reading and playing times may occur depending on the disc manufacturer, production method and the recording method as used by the user.
- Clean fingerprints and dust off the disc surface (coated side) with a soft cloth.
- The use of CD-R/CD-RW discs attached with labels may result in disc slot jams or difficulties in disc removal. Such discs may also result in noise while playing.
- Some CD-R/CD-RW discs may not properly operate depending on the disc manufacturer, production method and the record method as used by the user. If problems persist, trying using a different CD as continued use may result in malfunctions.
- The performance of this product may differ depending on the CDRW Drive Software.

(Continued)

#### (Continued)

- Copy-protected CDs such as Stype CDs may not function in the device. DATA discs cannot be played. (However, such discs may still operate but will do so abnormally.)
- Do not use abnormally shaped discs (8cm, heart-shaped, octagonshaped) as such discs could lead to malfunctions.
- If the disc is straddled on the disc slot without removal for 10 seconds, the disc will automatically be reinserted into the disc player.
- Only genuine audio CDs are supported. Other discs may result in recognition failure (e.g. copy CDR, CDs with labels)

## Disc CD (Type B, Type C)



- (1) Repeat Enable/disable repeat.
- (2) Shuffle Enable/disable shuffle play.
- (3) List View a list of all songs.
- (4) Menu Navigate to the menu screen.
- (5) Album Image View song info.

#### (6) Pause

Pause or play music.

(7) Playback progress
Press to skip to the desired location.

#### Playback

- Press the [MEDIA] button and select [Disc CD].
- When a disc is inserted in the audio system, disc playback begins automatically.

#### **Changing songs**

- Press the [SEEK/TRACK] button to play the previous or next song.
- Press and hold the [SEEK/TRACK] button to rewind or fast-forward the song that is currently playing.
- Search songs by turning the TUNE knob, and press the knob to play.

## Selecting songs from a list

Press the [List] to view a list of songs available to play.

Select and play the desired song.

## Repeat play

Press the [Repeat] to enable or disable 'Repeat all', 'Repeat current song'.

- Repeat all: All songs in the playlist are repeated.
- Repeat current song: The song that is currently playing is repeated.

## Shuffle play

Press the [Shuffle] to enable/disable 'Shuffle' play.

 Shuffle: Songs are played in a random order.

#### Menu

Press the [Menu] and select the desired function.

- Information: Detailed information on the song that is currently playing is displayed.
- Sound Settings: Audio sound settings can be changed

## information - Using MP3

#### Supported audio formats

|                          | ISO 9660 Level 1                  |  |  |
|--------------------------|-----------------------------------|--|--|
| File System              | ISO 9660 Level 2                  |  |  |
|                          | Romeo / Juliet (128 characters)   |  |  |
| Compressed audio formats | MPEG1 Audio Layer3                |  |  |
|                          | MPEG2 Audio Layer3                |  |  |
|                          | MPEG2.5 Audio Layer3              |  |  |
|                          | Windows Media Audio Ver 7.X & 8.X |  |  |

#### NOTICE

File formats other than the formats above may not be recognized or playable. Information such as filename may not be displayed.

## Range of supported compressed file types

#### 1. Bitrate range (Kbps)

| BIT RATE(kbps) | MPEG1  | MPEG2 | MPEG2.5 | WMA        |
|----------------|--------|-------|---------|------------|
|                | Layer3 |       |         | High Range |
|                | 32     | 8     | 8       | 48         |
|                | 40     | 16    | 16      | 64         |
|                | 48     | 24    | 24      | 80         |
|                | 56     | 32    | 32      | 96         |
|                | 64     | 40    | 40      | 128        |
|                | 80     | 48    | 48      | 160        |
|                | 96     | 56    | 56      | 192        |
|                | 112    | 64    | 64      |            |
|                | 128    | 80    | 80      |            |
|                | 160    | 96    | 96      |            |
|                | 192    | 112   | 112     |            |
|                | 224    | 128   | 128     |            |
|                | 256    | 144   | 144     |            |
|                | 320    | 160   | 160     |            |
|                | 320    | 100   | 100     |            |

## 2. Sampling frequency (Hz)

| MPEG1 | MPEG2 | MPEG2.5 | WMA   |
|-------|-------|---------|-------|
| 44100 | 22050 | 11025   | 32000 |
| 48000 | 24000 | 12000   | 44100 |
| 32000 | 16000 | 8000    | 48000 |

- The sound quality of MP3/WMA compressed files may vary depending on the bitrate. (A higher bitrate can have better sound quality.)
- The product only recognizes files with the MP3 or WMA extension.
   Files without one of these extensions are not recognized.
- 3. Number of recognizable folders and files
- Folders: 2,000 for USB
- Files: 6,000 for USB
- No recognition limit for folder hierarchies

- 4. Character display range (Unicode)
- Filenames: Up to 64 English characters (64 Korean characters)
- Foldername: Up to 32 English characters (32 Korean characters)

### NOTICE

The scroll feature can be used to display file and folder names that are too long to display on the screen. (if equipped)

Languages supported (Unicode support)

- Korean: 2,604 characters
- English: 94 characters
- Common Chinese characters: 4,888 characters
- Special symbols: 986 characters

## NOTICE

Japanese/Simplified Chinese characters are not supported.

# Disc MP3 (Type B, Type C)



(1) Repeat

Enable/disable repeat.

(2) Shuffle

Enable/disable shuffle play.

(3) List

View a list of all songs.

(4) Menu

Navigate to the menu screen.

(5) Album Image View song info.

### (6) Pause

Pause or play music.

# (7) Playback progress Press to skip to the desired location.

#### **Playback**

- Press the [MEDIA] button and select [Disc MP3].
- When a disc is inserted in the audio system, disc playback begins automatically.

## **Changing songs**

- Press the **[SEEK/TRACK]** button to play the previous or next song.
- Press and hold the [SEEK/TRACK] button to rewind or fast-forward the song that is currently playing.
- Search songs by turning the TUNE knob, and press the knob to play.

# Selecting songs from a list

Press the [List] to view a list of songs available to play.

Select and play the desired song.

## Repeat play

Press the [Repeat] to enable or disable 'Repeat all', 'Repeat current song' or 'Repeat folder'.

- Repeat all: Repeat all songs in the playlist.
- Repeat current song: The song that is currently playing is repeated.
- Repeat folder: All songs in the current folder are repeated.

## Shuffle play

Press the [Shuffle] to enable/disable 'Shuffle', 'Shuffle folder' play.

- Shuffle: Songs are played in a random order.
- Shuffle folder: Songs within the current folder are played in random order.

#### Menu

Press the [Menu] and select the desired function.

- Information: Detailed information on the song that is currently playing is displayed.
- Sound Settings: Audio sound settings can be changed.

# **i** Information

- Using the USB Devices
- Starting the vehicle while a USB device is connected can damage the device. Please disconnect USB devices before starting the vehicle.
- Starting the vehicle or stopping the engine while an external USB device is connected can result in failure of the external USB device to operate.
- Be cautious of static electricity when connecting/disconnecting external USB devices.
- An encrypted MP3 player is not recognized when connected as an external device.
- External USB devices may not be recognized, depending on the state of the external USB device.
- Only products with byte/sectors formatted at 4 KB or lower are recognized.
- Only USB devices in FAT12/16/32 format are recognized; NTFS and ExFAT file systems are not recognized.

(Continued)

#### (Continued)

- Some USB devices are not recognized due to compatibility issues.
- Do not touch the USB connections.
- Connecting and disconnecting USB devices rapidly over a short period of time can cause equipment failure.
- Abnormal sounds may be audible when the USB device is disconnected.
- Turn the audio off before connecting or disconnecting external USB devices.
- Recognition may take longer depending on the type, capacity or file format of the external USB device. This is not a product malfunction.
- Use of USB devices for purposes other than playing music files is prohibited.
- Image display and video playback are not supported.

(Continued)

#### (Continued)

- Use of USB accessories, including charge and heat though the USB I/F, can lead to reduced product performance or malfunctions. Do not use USB devices or accessories for these purposes.
- Use of aftermarket USB hubs and extension cables can result in the vehicle's audio system failing to recognize your USB device. Connect the USB device directly to the multimedia port of your vehicle.
- When using high-capacity USB devices with logical drive divisions, only files saved on the highest level logical drive can be played.

If applications are loaded on a USB drive, file playback may fail.

- Some MP3 players, cell phones, digital cameras, etc. (USB devices that are not recognized as mobile storage) may not operate normally when connected.
- USB charging may not be supported by some mobile devices.

(Continued)

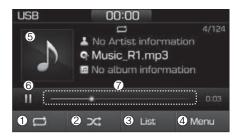
#### (Continued)

- Operation is guaranteed only for standard (Metal Cover Type) USB Memory drives.
- Operation of HDD, CF, SD and memory stick devices is not guaranteed.
- DRM (Digital Rights Management) files cannot be played.
- SD-type USB memory, CF-type USB memory, and other USB memory devices that require adapters for connection are not supported.
- Proper operation of USB HDDs or USB drives with connectors that loosen due to vehicle vibrations is not guaranteed. (iStick, etc.)
- USB products that are used as key chains or cell phone accessories may damage the USB



- jack and affect proper file playback. Please refrain from use. Use only products with plug connectors, as shown in the following illustration.
- When MP3 devices or cell phones are connected simultaneously through AUX, BT Audio and USB modes, a popping noise or malfunction may occur.

#### **USB**



- (1) Repeat Enable/disable repeat.
- (2) Shuffle Enable/disable shuffle play.
- (3) List View a list of all songs.
- (4) Menu Navigate to the menu screen.
- (5) Album Image View song info.

#### (6) Pause

Pause or play music.

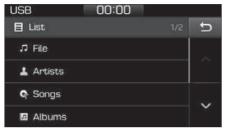
(7) Playback progress
Press to skip to the desired location.

#### Playback

- Press the **[MEDIA]** button, and select **[USB]**.
- Connect a USB drive to the USB port to automatically play files on the USB drive.

#### **Changing songs**

- Press the **[SEEK/TRACK]** button to play the previous or next song.
- Press and hold the [SEEK/TRACK] button to rewind or fast forward the currently playing song.
- Search songs by turning **TUNE** knob, and press the knob to play.



Selecting songs from a list

Press the [List] to see a list of songs available for play.

Select and play the desired song.

## Repeat play

Press the [Repeat] to enable or disable 'Repeat all', 'Repeat current song', 'Repeat folder' or 'Repeat category'.

- Repeat all: All songs in the playlist are repeated.
- Repeat current song: The currently playing song is repeated.
- Repeat folder: All songs in the current folder are repeated.
- Repeat category: Repeat all songs in the current category.

# **i** Information

The repeat folder function is available only when songs are playing from the [File] category under [List].

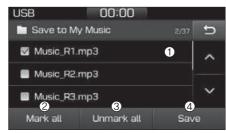
# Shuffle play

Press the [Shuffle] to enable/disable 'Shuffle', 'Shuffle folder' or 'Shuffle category' play.

- Shuffle: Songs are played in random order.
- Shuffle folder: Songs within the current folder are played in random order
- Shuffle category: Songs within the current category are played in random order.

#### Menu

Press the [Menu], and select the desired function.



- Save to My Music: Songs on your USB device can be saved to My Music.
- (1) File: Select a file to save.
- (2) Mark all: Select all files.
- (3) Unmark all: Deselect all files.

- (4) Save: Save the selected file(s).
  - Select the files you want to save, and press the [Save]. This saves the selected files to My Music.
  - Saving is canceled if phone calls are received or made while saving.
  - Up to 6,000 files can be saved.
  - The currently playing file on the USB device cannot be changed while saving.
  - My Music cannot be used while saving.
  - Up to 700 MB can be saved.
- Information: Detailed information on the currently playing song is displayed.
- Sound Settings: Audio sound settings can be changed.

# Information

- Using the iPod® Devices
- To use the audio system's iPod® control function, use the dedicated cable provided with your iPod®.
- Connecting the iPod® to the vehicle during play may result in a loud noise that lasts about one to two seconds. Connect the iPod® to the vehicle after stopping or pausing play.
- Connect the iPod® with the vehicle in the ACC ON state to begin charging.
- When connecting the iPod® cable, be sure to fully push the cable into the port.
- When EQ effects are enabled simultaneously on external devices, such as iPod®s and the audio system, the EQ effects may overlap, causing sound quality deterioration or distortion. Deactivate the EQ function for all external devices, if possible.
- Noise may occur when your iPod® or the AUX port is connected. Disconnect and store separately when not in use.

(Continued)

#### (Continued)

- There may be noise if the audio system is used with an iPod® or AUX external device connected to the power jack. In these cases, disconnect the iPod® or external device from the power jack.
- Play may be interrupted, or device malfunctions may occur depending on the characteristics of your iPod®/iPhone®.
- Play may fail if your iPhone<sup>®</sup> is connected through both Bluetooth<sup>®</sup> and USB. In this case, select Dock connector or Bluetooth<sup>®</sup> on your iPhone<sup>®</sup> to change the sound output settings.
- If your software version does not support the communication protocol or your iPod® is not recognized due to device failure, anomalies or defects, iPod® mode cannot be used.
- iPod® nano (5th generation) devices may not be recognized if the battery is low. Charge sufficiently before use.

(Continued)

#### (Continued)

- The search and song play order in the iPod® device may be different from the search order in the audio system.
- If the iPod<sup>®</sup> has failed due to an internal defect, please reset the iPod<sup>®</sup> (consult your iPod<sup>®</sup> manual).
- Depending on the software version, the iPod® may fail to sync with the system. If the media is removed or disconnected before recognition, the previous mode may not be restored (iPad® cannot be charged).
- Cables other than the 1-meter cable provided with iPod®/iPhone® products may not be recognized.
- When other music apps are used on your iPod®, the system sync function may fail due to malfunction of the iPod® application.

#### *iPod®*



- (1) Repeat Enable/disable repeat.
- (2) Shuffle Enable/disable shuffle play.
- (3) List View a list of all songs.
- (4) Menu Navigate to the menu screen.
- (5) Album Image View song info.

## (6) Pause

Pause or play music.

(7) Playback progress
Press to skip to the desired location.

## Playback

 Connect your iPod® to the audio USB port, press the [MEDIA] button, and select [iPod].

## **Changing songs**

- Press the [SEEK/TRACK] button to play the previous or next song.
- Press and hold the [SEEK/TRACK] button to rewind or fast forward the currently playing song.
- Search songs by turning the **TUNE** knob, and press the knob to play.

Selecting songs from a list

Press the [List] to see a list of songs available for play.

Select and play the desired song.

# Repeat play

Press the [Repeat] to enable or disable 'Repeat category', 'Repeat current song'.

- Repeat category: Repeat all songs in the current category.
- Repeat current song: The currently playing song is repeated.

# Shuffle play

Press the [Shuffle] to enable/disable 'Shuffle category' play.

 Shuffle category: Songs within the current category are played in random order.

#### Menu

Press the [Menu], and select the desired function.

- Information: Detailed info on the currently playing song is displayed.
- Sound Settings: Audio sound settings can be changed.



When other music programs are running

When songs saved on your iPod® are playing through a separate music app, the following screen is displayed.

- (1) Play/Pause: Pause or play music.
- (2) Play iPod files: Play music saved on your iPod®.
- (3) Album Image: View playback info.

# i Information

Operation cannot be carried out correctly due to iPod® application malfunction.

# Playing iPod files

 Select [Play iPod files] to play songs saved on your iPod®.
 If there are no songs saved on your iPod®, the [Play iPod files] is disabled.

# *i* Information

- Using Bluetooth® (BT) Audio
- Bluetooth® Audio mode can only be used if a Bluetooth®-enabled phone is connected. Only devices that support Bluetooth® audio can be used.
- If the Bluetooth®-enabled phone is disconnected during play, the music stops.
- When the TRACK UP/DOWN buttons are used during Bluetooth® audio streaming, a popping noise or sound interruptions may occur, depending on the cell phone device.
- Depending on the cell phone model, the audio streaming function may not be supported.
- If a phone call is made or received when music is playing in Bluetooth® Audio mode, the call may mix with the music.
- When returning to Bluetooth® Audio mode after ending a call, play might not resume automatically for some cell phone models.

## NOTICE

- Bluetooth® Wireless Technology Handsfree is a feature that enables drivers to practice safe driving. Connecting the car audio system with a Bluetooth® Wireless Technology phone allows the user to conveniently make calls, receive calls, and manage the phone book. Before using the Bluetooth® Wireless Technology, carefully read the contents of this user's manual.
- Excessive use or operations while driving may lead to negligent driving practices and be the cause of accidents.
- Do not operate the device excessively while driving.
- Viewing the screen for prolonged periods of time is dangerous and may lead to accidents.
- When driving, view the screen only for short periods of time.

#### **BT Audio**



# (1) Repeat

Enable/disable repeat.

# (2) Shuffle

Enable/disable shuffle play.

## (3) Menu

Navigate to the menu screen.

# (4) Play/Pause

Pause or play music.

# **i** Information

- Some cell phone models may not support particular functions.
- Bluetooth® audio volume is synced with cell phone media volume.

#### Playback

 Press the [MEDIA] button, and select [BT Audio].

# **Changing songs**

 Press the [SEEK/TRACK] button to play the previous or next song.

# *i* Information

Some cell phones may not support this function.

## Repeat play

Press the [Repeat] to enable or disable 'Repeat all', 'Repeat current song' or 'Repeat category'.

- Repeat all: All songs in the playlist are repeated.
- Repeat current song: The currently playing song is repeated.
- Repeat category: Repeat all songs in the current category.

# Information

The repeat play function is engaged, depending on the operation of the connected Bluetooth device.

## Shuffle play

Press the [Shuffle] to enable/disable 'Shuffle', 'Shuffle category' play.

- Shuffle: Songs are played in random order.
- Shuffle category: Songs within the current category are played in random order.

# Information

The shuffle function is engaged, depending on the operation of the connected Bluetooth device.

#### Menu

Press the [Menu], and select the desired function.

- Connections: The currently connected Bluetooth<sup>®</sup> device can be changed.
- Information: Detailed information on the currently playing song is displayed.
- Sound Settings: Audio sound settings can be changed.
   4-30

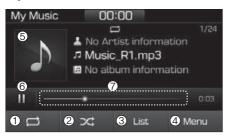
## **AUX**



# **Running AUX**

- Press the [MEDIA] button, and select [AUX].
- Connect the external device connection jack to the AUX terminal to run AUX.
- (1) Sound Settings: Audio sound settings can be changed.

## My Music



- (1) Repeat Enable/disable repeat.
- (2) Shuffle Enable/disable shuffle play.
- (3) List View a list of all songs.
- (4) Menu Navigate to the menu screen.
- (5) Album Image View song info.

#### (6) Pause

Pause or play music.

#### (7) Playback progress

Press to skip to the desired location.

## **Playback**

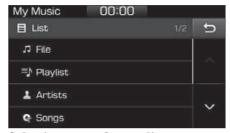
Press the **[MEDIA]** button, and select [My Music].

- My Music cannot be selected if it does not contain music.
- Check the content of your USB drive before saving music to My Music.

# **Changing songs**

Press the **[SEEK/TRACK]** button to play the previous or next song.

- Press and hold the [SEEK/TRACK] button to rewind or fast forward the currently playing song.
- Search songs by turning the TUNE knob and press the knob to play.



Selecting songs from a list

Press the [List] to see a list of songs available for play.

Select and play the desired song.

## Repeat play

Press the [Repeat] to enable or disable 'Repeat all', 'Repeat current song' or 'Repeat category'.

- Repeat all: All songs in the playlist are repeated.
- Repeat current song: The currently playing song is repeated.
- Repeat category: Repeat all songs in the current category.

# Shuffle play

Press the [Shuffle] to enable/disable 'Shuffle', 'Shuffle category' play.

- Shuffle: Songs are played in random order.
- Shuffle category: Songs within the current category are played in random order.

#### Menu

Press the [Menu], and select the desired function.



- Delete files: You can delete files from My Music.
- (1) File: Select saved file.
- (2) Mark all: Select all files.
- (3) Unmark all: Deselect all files.

- (4) Delete: Delete the selected file(s).
  - Select the file to delete, then press the [Delete] to delete it.
  - Delete is canceled if phone calls are received or made during delete.
- Add to playlist: Frequently played songs can be paired in a [Playlist].
  - Songs can be played from the [Playlist].
- Information: Detailed info on the currently playing song is displayed.
- Sound Settings: Audio sound settings can be changed.

## **Delete from playlist**

When a song in the playlist is playing, press the [Menu] and select [Delete from playlist].

Select the song to delete, then press [Delete].

#### **Phone**

- *i* Information
  - Using the Bluetooth® Wireless Technology Cellular Phone
- Bluetooth® is a near-field wireless networking technology that uses the 2.4 GHz frequency to connect various devices within a certain distance wirelessly.
- The technology is used in PCs, peripherals, Bluetooth® phones, tablet PCs, household appliances and automobiles. Devices supporting Bluetooth® can exchange data at high speeds without physical cable connections.
- Bluetooth® Handsfree devices enable convenient access to phone functions through cell phones equipped with Bluetooth®.
- Some Bluetooth® devices may not be supported by the Bluetooth® Handsfree function.

(Continued)

## (Continued)

- When Bluetooth® is connected and calls are attempted through a connected cell phone from outside the vehicle, the call is connected through the Bluetooth® Handsfree function of the vehicle.
- Please be sure to disconnect the Bluetooth® Handsfree function through your Bluetooth® device or the audio screen.

## Safety precautions

- The Bluetooth® Handsfree function helps drivers to drive safely. By connecting a Bluetooth®-enabled phone to the vehicle's audio system, phone calls can be made and received through the audio system and contacts can be managed. Consult the user manual before use.
- Excessive manipulation of controls while driving, making it difficult to pay attention to the road ahead, can lead to accidents. Do not operate the device excessively while driving.
- Looking at the screen for a prolonged time increases the risk of accidents. Keep time spent looking at the screen to a minimum.

# Precautions when connecting Bluetooth® devices

- The vehicle supports the following Bluetooth® functions. Some Bluetooth® devices may not support some functions.
  - 1) Bluetooth® Handsfree phone calls
  - Operations during a call (Private, Switch, Mic Vol. controls)
  - 3) Download call history saved to the Bluetooth® device
  - 4) Download contacts saved to the Bluetooth® device
  - 5) Automatic contacts/call history download when Bluetooth® is connected
  - 6) Automatic Bluetooth® device connection when the vehicle is started
  - 7) Bluetooth® audio streaming playback
- Before connecting the audio system to your device, make sure your device supports Bluetooth<sup>®</sup>.

- Even if your device supports Bluetooth®, a Bluetooth® connection cannot be established if the device's Bluetooth® function is switched off. Search and connect with the Bluetooth® function enabled.
- Pair or connect Bluetooth® devices to the audio system with the vehicle at a standstill.
- If a Bluetooth® connection is lost due to abnormal conditions while a Bluetooth® device is connected (communication range exceeded, device power OFF, communication errors, etc.), the disconnected Bluetooth® device is searched for and automatically reconnected.
- If you want to disable the Bluetooth® device auto-connect function, turn the Bluetooth® function OFF on your device. Consult the user manuals for individual devices to see whether Bluetooth® is supported.
- Handsfree call quality and volume may vary depending on the type of Bluetooth® device.

- Some Bluetooth® devices are subject to intermittent Bluetooth® connection failures. In this case, use the following method.
  - Turn the Bluetooth® function off on your Bluetooth® device → Turn it on and try again.
  - Delete the paired device from both the audio system and Bluetooth® device, then pair again.
  - 3) Power down your Bluetooth® device → Turn it on and try again.
  - Completely remove the battery from your Bluetooth® device; reinsert it, reboot, and attempt connection.
  - 5) Restart the vehicle and reattempt connection.

# Pairing a Bluetooth® device

Information on pairing Bluetooth® devices

- Pairing refers to the process of pairing Bluetooth® cell phones or devices with the system prior to connection. This is a necessary procedure for Bluetooth® connection and usage.
- Up to five devices can be paired.
- Pairing Bluetooth® device is not allowed while vehicle is moving.

Pairing the first Bluetooth® device
Select the [PHONE] button on the
audio system or the [CALL] button
on the steering wheel remote control

→ Search for the vehicle from the
Bluetooth® device, and pair → Enter
the passkey on the Bluetooth®
device or approve passkey

→ Bluetooth® pairing completed.

 When the [PHONE] button on the audio or the [CALL] button on the steering wheel remote control is pressed, the following screen is displayed. Devices can now be paired.

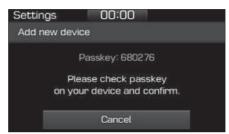


(1) Device name: Searched name in Bluetooth® device.

# *i* Information

The device name in the image above is an example. Refer to your device for the actual name of your device.

- Search for available Bluetooth® devices in the Bluetooth® menu of your Bluetooth® device (cell phone, etc.).
- Confirm that the device name in your Bluetooth<sup>®</sup> device matches the device name shown on the audio screen, then select it.



- 4. For devices that require passkey confirmation, the following screen is shown on the audio system. A 6-digit passkey input screen is shown in the Bluetooth® device.
  - After confirming that the 6-digit passkey on the audio screen and the Bluetooth® device are identical, press [OK] in your Bluetooth® device.

# Information

The 6-digit passkey in the image above is an example. Refer to your vehicle for the actual passkey.

Pairing a second Bluetooth® device

Press the [SETUP] button on the audio system → Select [Bluetooth] → Select [Connections] → Select [Add new].



- The pairing procedure from this point is identical to [Pairing the first Bluetooth device].

# Information

- Bluetooth® standby mode lasts for three minutes. If a device is not paired within three minutes, pairing is canceled. Start over from the beginning.
- For most Bluetooth® devices, a connection is established automatically after pairing. Some devices, however, require separate confirmation when connecting after pairing. Be sure to check your Bluetooth® device after pairing to confirm that it has connected.

# Connecting Bluetooth® devices

If there are no connected devices

Select the [PHONE] button on the audio system or the [CALL] button in the steering wheel remote control ➡ List of paired Bluetooth® devices ➡ Select the desired Bluetooth® device from the list ➡ Connect Bluetooth®.



#### If there are connected devices

Select the **[PHONE]** button on the audio system → Select [Settings] → Select [Connections] → Select Bluetooth® device to connect → Select [Connect] → Connect Bluetooth®.



# **i** Information

- Only one Bluetooth® device can be connected at a time.
- When a Bluetooth® device is connected, other devices cannot be paired.

# Accepting/rejecting phone calls

Receiving phone calls with Bluetooth® connected.



- Caller name: If the caller number is in your contacts, the corresponding name is displayed.
- (2) Incoming phone number: Incoming phone number is displayed.
- (3) Accept: Accept call.
- (4) Reject: Reject call.

# Information

- When the incoming call screen is displayed, audio mode and the settings screen cannot be shown. Only call volume control is supported.
- Some Bluetooth® devices may not support the call reject function.
- Some Bluetooth® devices may not support the phone number display function.

# Operation during calls

Incoming call with Bluetooth® connected → Select [Accept].



- (1) Call duration: Call duration display.
- (2) Caller name: If the caller number is in your contacts, the corresponding name is displayed.
- (3) Incoming phone number: Incoming phone number is displayed.
- (4) Keypad: Number keypad for Automatic Response Service input is displayed.
- (5) Private: Call is transferred to a cell phone.
- (6) Microphone Volume(Outgoing Volume): Adjust outgoing voice volume.
- (7) End: End call.

# *i* Information

- Some Bluetooth® devices may not support the Private function.
- The outgoing voice volume may vary depending on the type of Bluetooth® device. If the outgoing voice volume is too high or low, adjust the Microphone Volume(Outgoing Volume).

#### **Favourites**

Select the **[PHONE]** button on the audio system → Select [Favourites(Favorites)] → Favourites(Favorites) list displayed.



- Favourites(Favorites) list: A list of paired favourites(favorites) is displayed.
  - Connect a call when selected.
- (2) Add to favourites(Favorites): Add a downloaded phone number to favourites(favorites).
- (3) Delete: Delete a saved Favourites (Favorites).

# Information

- Up to 20 favourites can be paired for each paired Bluetooth® device.
- Favourites can be accessed when the Bluetooth® device they were paired from is connected.
- The audio system does not download favourites from Bluetooth® devices. Favourites must be newly saved before use.
- To add to favourites, contacts must be downloaded first.
- Saved favourites are not updated even if the contacts of the connected Bluetooth® device are changed. In this case, favourites need to be deleted and added again.

# Call history

Select the **[PHONE]** button on the audio system → Select [Call history] → Call history is displayed.



- (1) Call history: Display the downloaded call history list.
  - Connect a call when selected.
- (2) Sort by: Sort by all calls, dialed calls, received calls or missed calls.
- (3) Download: Download call history from connected Bluetooth® devices.

# **i** Information

- Up to 50 dialed, received and missed calls are saved.
- When the latest call history is received, the existing call history is deleted.

#### **Contacts**

Select the **[PHONE]** button on the audio system → Select [Contacts] → Select letter (ABC) → Contacts displayed.



- Contacts: Display downloaded contacts.
  - Connect a call when selected.
- (2) Download: Download contacts from connected Bluetooth® devices.

# *i* Information

- Up to 2,000 contacts can be saved.
- In some cases, additional confirmation from your Bluetooth® device is necessary when downloading contacts. If downloading of contacts unsuccessful, consult your Bluetooth® device's settings or the audio screen to approve the download.
- Contacts without phone numbers are not displayed.

#### Dial

Select the **[PHONE]** button on the audio → Select [Dial].



(1) Phone number entry window: The phone number entered using the keypad is displayed.

## (2) Clear

- Press to delete individual digits.
- Press and hold to delete the entire phone number.
- (3) Keypad: Enter phone number.
- (4) Bluetooth® Phone name
  - The name of the connected Bluetooth® device is displayed.
  - Contacts matching the keypad number/letter input are displayed.

# (5) Call

- Enter and select a phone number to call.
- Select without entering a phone number to see the most recent dialed call.

# Settings

Select the **[PHONE]** button on the audio → Select [Settings].

- For phone settings, refer to Setup page.

# Setup



Access Display, Sound, Date/Time, Bluetooth, System, Screensaver and Display Off settings.

Select the **[SETUP]** button on the audio system.

# Display

Select the **[SETUP]** button on the audio system → Select [Display].

- Dimming mode(Mode): Audio screen brightness can be adjusted to the time of day.
- Brightness(Illumination): The brightness of the audio screen can be changed.
- Text scroll\*: If text is too long to be displayed on the screen, enable the text scroll function.
- \* if equipped

#### Sound

Select the **[SETUP]** button on the audio system → Select [Sound].

- Position: Sound balance and panning can be adjusted.
- Equaliser(Tone): Sound tone color can be adjusted.
- Speed dependent volume control: Automatically adjust volume based on vehicle speed.
- Beep: Select whether to play a beep sound when the screen is touched.

#### Date/Time

Select the **[SETUP]** button on the audio system → Select [Date/Time].

- Set time: Set the time displayed on the audio screen.
- Time format: Choose between 12hour and 24-hour time formats.
- Set date: Set the date displayed on the audio screen.

## Bluetooth

Select the **[SETUP]** button on the audio system → Select [Bluetooth].

- Connections: Control pairing, deletion, connection and disconnection of Bluetooth® devices.
- Auto connection priority: Set the connection priority of Bluetooth® devices when the vehicle is started.
- Update contacts: Contacts can be downloaded from connected Bluetooth® devices.
- Bluetooth voice guidance\*: Play or mute voice prompts for Bluetooth® device pairing, connection and errors.
  - \* if equipped

# Information

- When paired devices are deleted, the call history and contacts of the device saved to the audio system are deleted.
- For Bluetooth® connections with low connection priority, some time may be required for the connection to be established.
- Contacts can be downloaded only from the currently connected Bluetooth® device.
- If no Bluetooth® device is connected, the Download Contacts button is disabled.
- If the language setting is Slovakian, Hungarian or Korean, Bluetooth voice guidance\* is not supported.
  - \* if equipped

# System

Select the **[SETUP]** button on the audio system → Select [System].

- Memory information: View My Music memory usage.
- Language: Change the user language.
- Default: Reset the audio system.

# *i* Information

The system resets to the default values, and all saved data and settings are lost.

#### Screensaver

Set the information displayed when the audio system is switched off or the screen is turned off.

Select the **[SETUP]** button on the audio system  $\rightarrow$  Select [Screensaver].

- Analogue: An analog clock is displayed.
- Digital: A digital clock is displayed.
- · None: No information is displayed.

# Display Off

To prevent glare, the screen can be turned off with the audio system in operation.

Select the **[SETUP]** button on the audio system → Select [Display Off].

# Information

Use 'Screensaver' to set the information to be displayed when the screen is turned off.

# Declaration of Conformity

CE for EU

# Declaration of Conformity We, manufacturer, hereby declare that the product Model: AC111G2GG (Varient: AC110G2GG, AC110G2GN, AC110G2GE, AC110G2GS ACTIOGZMG ACTIOGZUG ACBIOGZEG ACBIOGZEE ACBITIGZEE ACBCOGZEE Type: DIGITAL CAR AUDIO SYSTEM satisfies all the technical regulations applicable to the product within the scope of Council Directives 2006/95/EC; 2004/108/EC and 99/5/EC; EN 300 328 V 1 8 T EN 62311 2008 EN 301 489-1 V 1.9-2 /-17 VZ 2.1 EN 55013:2013. EN 55020:2007+A11:2011 EN 60065-2002+A1 2006+A11 2008+A2 2010+A12 2011 All essential radio test suites have been carried out. Testing laboratory : KCTL Inc. 65, Sirwon-ro, Yeongtong au, Suwon, Gyeonagi do, Korea 443-360 Tel: +82 70 8685 8324 / Fax: +82 505 299 8311 Authorized representative or manufacturer Hyundai Mobis Co., Ltd. 203, Teheran ro, Gangnern pu, Seout, 135,977, Koma Tel 82-31-200-0096 / Fax: 62-31-999-1788 This declaration is issued under the sole responsibility of the manufacturer and, if applicable, his authorized Representative, and is marked in accordance with the CE marking directive 90/66/EEC. Point of contact : Hyundai Mobis Co., Ltd. Tel. 82-31-260-0098 / Fax: 82-31-899-1788 Seoul, Korea October 07, 2015 Director

# **NCC** for Taiwan

| 根據NCC低功率電波輻射性電機管理辦法規定:   |   |  |
|--|---|--|
| 第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、<br>加大功率或變更原設計之特性及功能。 |   |  |
| 第十四條   | 低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。<br>前項合法通信,指依電信法規定作業之無線電通信。<br>低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。 |  |

# Driving your vehicle

| Before driving   | 5-4  |
|--|--|
| Before entering the vehicle  |  |
| Before starting  |  |
| Ignition switch  | 5-5  |
| Key ignition switch  | 5-6  |
| Engine Start/Stop button   | 5-9  |
| Dual clutch transmission   | 5-15   |
| Dual clutch transmission operation   | 5-15   |
| Paddle shifter   | 5-23   |
| Parking  | 5-24   |
| Good driving practices   | 5-24   |
|  |  |
| Coasting guide (Plug-in hybrid vehicle)  |  |
|  | 5-26   |
| Coasting guide (Plug-in hybrid vehicle)<br>Braking system  | 5-26<br>5-27   |
| Coasting guide (Plug-in hybrid vehicle)  | <b>5-26</b><br><b>5-27</b><br>5-27                   |
| Coasting guide (Plug-in hybrid vehicle)<br>Braking system<br>Power brakes  | <b>5-26</b><br><b>5-27</b><br>5-27<br>5-28           |
| Coasting guide (Plug-in hybrid vehicle) Braking system Power brakes Disc brakes wear indicator   | 5-26<br>5-27<br>5-27<br>5-28<br>5-28                 |
| Coasting guide (Plug-in hybrid vehicle) Braking system Power brakes Disc brakes wear indicator Parking brake   | 5-26<br>5-27<br>5-27<br>5-28<br>5-28                 |
| Coasting guide (Plug-in hybrid vehicle) Braking system Power brakes Disc brakes wear indicator Parking brake   | 5-26<br>5-27<br>5-28<br>5-28<br>5-31<br>5-33         |
| Coasting guide (Plug-in hybrid vehicle) Braking system Power brakes Disc brakes wear indicator Parking brake Anti-lock Brake System (ABS) Electronic Stability Control (ESC) | 5-26<br>5-27<br>5-28<br>5-28<br>5-31<br>5-33         |
| Coasting guide (Plug-in hybrid vehicle) Braking system Power brakes Disc brakes wear indicator Parking brake   | 5-26<br>5-27<br>5-28<br>5-28<br>5-31<br>5-33<br>5-36 |

| Blind Spot Detection system (BSD)<br>BSD (Blind Spot Detection) / | 5-40 |
|---|------|
| •   | г 41 |
| LCA (Lane Change Assist)  |      |
| RCTA (Rear Cross Traffic Alert)                                   |      |
| Detecting sensor  |      |
| Limitations of the system   | 5-47 |
| Autonomous Emergency Braking (AEB)                                | 5-49 |
| System setting and activation                                     |      |
| AEB warning message and system control                            | 5-51 |
| AEB sensor  |      |
| System malfunction  |      |
| Limitations of the system   |      |
| Lane Keeping Assist System (LKAS)                                 |      |
| LKAS operation  |      |
| Warning light and message   |      |
| Limitations of the System   |      |
| LKAS function change  |      |
| Speed limit control system  | 5-71 |
| Speed Limit Control operation                                     |      |
| Cruise control  |      |
| Cruise Control operation  |      |
|   |      |

| Smart Cruise Control system5–79 Smart Cruise Control speed5–81 |
|--|
|  |
|  |
| Smart Cruise Control Vehicle-to-Vehicle                        |
| Distance5-85   |
| Sensor to detect distance to the vehicle ahead5-88             |
|  |
| To adjust the sensitivity of Smart Cruise Control5–90          |
| To convert to Cruise Control mode5–90                          |
| Limitations of the system5-91                                  |
| Special driving conditions5–96                                 |
| Hazardous driving conditions5–96                               |
| Rocking the vehicle5–96  |
| Smooth cornering5–97   |
| Driving at night5-97   |
| Driving in the rain5–97  |
| Driving in flooded areas5–98                                   |
| Highway driving5-98  |
| Winter driving5-99   |
| Snow or icy conditions5–99                                     |
| Winter Precautions5-101  |

| railer towing (for europe)        | 5-104 |
|-----------------------------------|-------|
| If you decide to pull a trailer?  | 5-105 |
| Trailer towing equipment          | 5-107 |
| Driving with a trailer            | 5-108 |
| Maintenance when towing a Trailer | 5-112 |
| /ehicle weight                    | 5-113 |
| Overloading                       | 5-113 |
|                                   |       |

## **A** WARNING

## Carbon monoxide (CO) gas is toxic. Breathing CO can cause unconsciousness and death.

Engine exhaust contains carbon monoxide which cannot be seen or smelled.

## Do not inhale engine exhaust.

If at any time you smell engine exhaust inside the vehicle, open the windows immediately. Exposure to CO can cause unconsciousness and death by asphyxiation.

#### Be sure the exhaust system does not leak.

The exhaust system should be checked whenever the vehicle is raised to change the oil or for any other purpose. If you hear a change in the sound of the exhaust or if you drive over something that strikes the underneath side of the vehicle, we recommend that the exhaust system be checked as soon as possible by an authorized HYUNDAI dealer.

## Do not run the engine in an enclosed area.

Letting the engine idle in your garage, even with the garage door open, is a hazardous practice. Run the engine only long enough to start the engine and to move the vehicle out of the garage.

## Avoid idling the engine for prolonged periods with people inside the vehicle.

If it is necessary to idle the engine for a prolonged period with people inside the vehicle, be sure to do so only in an open area with the air intake set at "Fresh" and fan control set to high so fresh air is drawn into the interior.

#### Keep the air intakes clear.

To assure proper operation of the ventilation system, keep the ventilation air intakes located in front of the windshield clear of snow, ice, leaves, or other obstructions.

## If you must drive with the tailgate open:

Close all windows.

Open instrument panel air vents.

Set the air intake control at "Fresh", the air flow control at "Floor" or "Face", and the fan control set to high.

## **BEFORE DRIVING**

# Before entering the vehicle

- Be sure all windows, outside mirror(s), and outside lights are clean and unobstructed.
- Remove frost, snow, or ice.
- Visually check the tires for uneven wear and damage.
- Check under the vehicle for any sign of leaks.
- Be sure there are no obstacles behind you if you intend to back up.

# **Before starting**

- Make sure the hood, the tailgate, 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 belts.
- Check the gauges and indicators in the instrument panel and the messages on the instrument display when the ignition switch is in the ON position.
- Check that any items you are carrying are stored properly or fastened down securely.

# **A** WARNING

To reduce the risk of SERIOUS INJURY or DEATH, take the following precautions:

- ALWAYS wear your seat belt. All passengers must be properly belted whenever the vehicle is moving. For more information, refer to "Seat Belts" in chapter 2.
- Always drive defensively. Assume other drivers or pedestrians may be careless and make mistakes.
- Stay focused on the task of driving. Driver distraction can cause accidents.
- Leave plenty of space between you and the vehicle in front of you.

# **A** WARNING

NEVER drink or take drugs and drive.

Drinking or taking drugs and driving is dangerous and may result in an accident and SERI-OUS 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 or more dangerous than driving under the influence of alcohol.

(Continued)

# (Continued)

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.

# **IGNITION SWITCH**

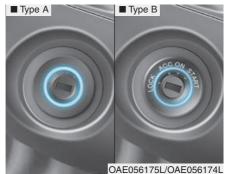
# **A** WARNING

To reduce the risk of SERIOUS INJURY or DEATH, take the following precautions:

- NEVER allow children or any person who is unfamiliar with the vehicle to touch the ignition switch or related parts. Unexpected and sudden vehicle movement can occur.
- NEVER reach through the steering wheel for the ignition switch, 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.

# Key ignition switch (if equipped)

# Illuminated ignition switch (if equipped)



Whenever the front door is opened, the ignition switch will illuminate, provided the ignition switch is not in the ON position. The light will go off immediately when the ignition switch is turned on or go off after about 30 seconds when the door is closed.



# **A** WARNING

 NEVER turn the ignition switch to the LOCK or ACC position while the vehicle is in motion except in an emergency. This will result in engine 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.

(Continued)

# (Continued)

 Before leaving the driver's seat, always make sure the shift lever is in the P (Park) position, apply the parking brake, and turn the ignition switch to the LOCK position.

Unexpected vehicle movement may occur if these precautions are not followed.

# Key ignition switch positions

| Switch<br>Position | Action   | Notes  |
|--------------------|--|--|
|                    | To turn the ignition switch to the LOCK position, put the key in at the ACC position and turn the key towards the LOCK position.   |  |
| LOCK               | The ignition key can be removed in the LOCK position.  |  |
| LOCK               | The steering wheel locks to protect the vehicle from theft. (if equipped)  |  |
| ACC                | Electrical accessories are usable. The steering wheel unlocks.   | If difficulty is experienced turning the ignition switch to the ACC position, turn the key while turning the steering wheel right and left to release. |
| ON                 | This is the normal key position when the vehicle has started. All features and accessories are usable. The warning lights can be checked when you turn the ignition switch from ACC to ON. | Do not leave the ignition switch in the ON position when the vehicle is not running to prevent the battery from discharging.                           |
| START              | To start the vehicle, turn the ignition switch to the START position. The switch returns to the ON position when you let go of the key.  | The engine will crank until you release the key.   |

## Starting the vehicle

# **A** WARNING

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes, such as high heels, ski boots, sandals, flip-flops, etc., may interfere with your ability to use the brake and accelerator pedals.
- Do not start the vehicle with the accelerator pedal depressed.
   The vehicle can move which can lead to an accident.
- Wait until the engine rpm is normal. The vehicle may suddenly move if the brake pedal is released when the rpm is high.

- 1. Make sure the parking brake is applied.
- Make sure the shift lever is in P (Park).
- 3. Depress the brake pedal.
- 4. Turn the ignition switch to the START position. Hold the key (maximum of 10 seconds) until the " = " comes on and release it."

# Information

- It is best to maintain a moderate engine speed until the vehicle engine comes up to normal operating temperature. Avoid harsh or abrupt acceleration or deceleration while the engine is still cold.
- Always start the vehicle with your foot on the brake pedal. Do not depress the accelerator while starting the vehicle. Do not race the engine while warming it up.

## NOTICE

To prevent damage to the vehicle:

- Do not hold the ignition key in the START position for more than 10 seconds. Wait 5 to 10 seconds before trying again.
- Do not turn the ignition switch to the START position with the engine running. It may damage the starter.
- If the " = " indicator turns off while you are in motion, do not attempt to move the shift lever to the P (Park) position.
  - If traffic and road conditions permit, you may put the shift lever in the N (Neutral) position while the vehicle is still moving and turn the ignition switch to the START position in an attempt to restart the engine.
- Do not push or tow your vehicle to start the vehicle.

# Engine Start/Stop button (if equipped)



Whenever the front door is opened, the Engine Start/Stop button will illuminate and will go off 30 seconds after the door is closed.

# **▲** WARNING

To turn the hybrid system off in an emergency:

Press and hold the Engine Start/Stop button for more than two seconds OR Rapidly press and release the Engine Start/Stop button three times (within three seconds).

If the vehicle is still moving, you can restart the hybrid system without depressing the brake pedal by pressing the Engine Start/Stop button with the shift lever in the N (Neutral) position.

# **A** WARNING

- NEVER press the Engine Start/Stop button while the vehicle is in motion except in an emergency. This will result in the hybrid system 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 shift lever is in the P (Park) position, set the parking brake, press the Engine 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.

# Engine Stop/Start button positions

| Button Position        | Action  | Notice  |
|------------------------|---|---|
| OFF  ENGINE START STOP | To turn off the vehicle, press the Engine Start/Stop button with shift lever in P (Park). When you press the Engine Start/Stop button without the shift lever in P (Park), the Engine Start/Stop button does not turn to the OFF position, but turns 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  ENGNE START STOP  | Press the Engine Start/Stop button when the button is in the OFF position without depressing the brake pedal. Electrical accessories are usable. The steering wheel unlocks.  | <ul> <li>If you leave the Engine Start/Stop button in the ACC position for more than one hour, the battery power will turn off automatically to prevent the battery from discharging.</li> <li>If the steering wheel doesn't unlock properly, the Engine Start/Stop button will not work. Press the Engine Start/Stop button while turning the steering wheel right and left to release.</li> </ul> |

| Button Position               | Action   | Notice   |
|-------------------------------|--|--|
| ON<br>ENGINE<br>START<br>STOP | Press the Engine 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 Engine Start/Stop button in the ON position when the vehicle is not running to prevent the battery from discharging.  |
| START  ENGINE START STOP      | To start the vehicle, depress the brake pedal and press the Engine Start/Stop button with the shift lever in the P (Park) position.                                      | If you press the Engine Start/Stop button without depressing the brake pedal, the vehicle does not start and the Engine Start/Stop button changes as follows:  OFF → ACC → ON → OFF or ACC |

# Starting the hybrid system

# **A** WARNING

- Always wear appropriate shoes when operating your vehicle. Unsuitable shoes, such as high heels, ski boots, sandals, flipflops, etc., may interfere with your ability to use the brake and accelerator pedals.
- Do not start the vehicle with the accelerator pedal depressed.
   The vehicle can move which can lead to an accident.

# *i* Information

- The vehicle will start by pressing the Engine 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 hybrid system may not start.
- When the Engine 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 hybrid system is ON.

- 1. Always carry the smart key with you.
- 2. Make sure the parking brake is applied.
- Make sure the shift lever is in P (Park).
- 4. Depress the brake pedal.
- Press the Engine Start/Stop button. If the vehicle starts, the " = " indicator will come on.

# Information

- Do not wait for the engine to warm up while the vehicle remains stationary.
  - Start driving at moderate engine speeds. Steep accelerating and decelerating should be avoided.
- Always start the vehicle with your foot on the brake pedal. Do not depress the accelerator while starting the vehicle. Do not race the engine while warming it up.
- 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 move the shift lever to the P (Park) position.
- Do not push or tow your vehicle to start the vehicle.

#### NOTICE

To prevent damage to the vehicle: Do not press the Engine Start/Stop button for more than 10 seconds except when the stop lamp fuse is blown.

When the stop lamp fuse is blown, you cannot normally start the hybrid system. 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 Engine Start/Stop button for 10 seconds with the Engine Start/Stop button in the ACC position.

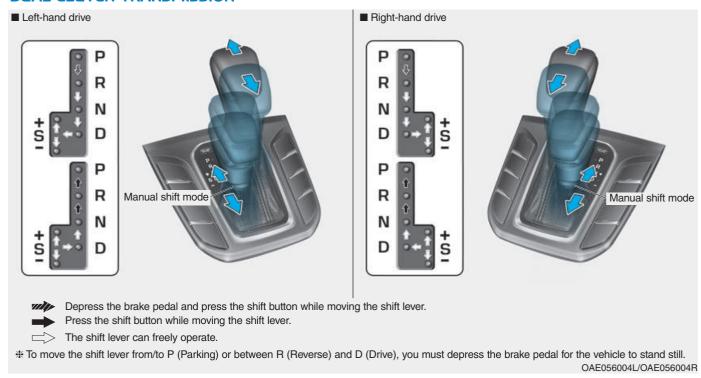
For your safety always depress the brake pedal before starting the vehicle.



# *i* Information

If the smart key battery is weak or the smart key does not work correctly, you can start the vehicle by pressing the Engine Start/Stop button with the smart key in the direction of the picture above.

#### **DUAL CLUTCH TRANSMISSION**



# **Dual clutch transmission operation**

The dual clutch transmission has six forward speeds and one reverse speed.

The individual speeds are selected automatically in the D (Drive) position.

- The dual clutch transmission can be thought of as an automatically shifting manual transmission. It gives the driving feel of a manual transmission, yet provides the ease of a fully automatic transmission.
- When D (Drive) is selected, the transmission will automatically shift through the gears similar to a conventional automatic transmission. Unlike a traditional automatic transmission, the gear shifting can sometimes be felt and heard as the actuators engage the clutches and the gears are selected.
- The dual clutch transmission incorporates a dry-type dual clutch mechanism, which allows for better acceleration performance and increased fuel efficiency while driving. But it differs from a conventional automatic transmission because it does not incorporate a torque converter. Instead, the transition from one gear to the next is managed by clutch slip, especially at lower speeds.

- As a result, shifts are sometimes more noticeable, and a light vibration can be felt as the transmission shaft speed is matched with the engine shaft speed. This is a normal condition of the dual clutch transmission.
- The dry-type clutch transfers torque more directly and provides a direct-drive feeling which may feel different from a conventional automatic transmission. This may be more noticeable when launching the vehicle from a stop or when traveling at low, stop-and-go vehicle speeds.
- When rapidly accelerating from a lower vehicle speed, the engine rpm may increase dramatically as a result of clutch slip as the dual clutch transmission selects the correct gear. This is a normal condition.
- When accelerating from a stop on an incline, press the accelerator smoothly and gradually to avoid any shudder feeling or jerkiness.

- When traveling at a lower vehicle speed, if you release the accelerator pedal quickly, you may feel engine braking before the transmission changes gears. This engine braking feeling is similar to operating a manual transmission at low speed.
- When driving downhill, you may wish to move the gear shift lever to Manual Shift mode and downshift to a lower gear in order to control your speed without using the brake pedal excessively.
- When you turn the engine on and off, you may hear clicking sounds as the system goes through a selftest. This is a normal sound for the dual clutch transmission.
- During the first 1,500 km (1000 miles), you may feel that the vehicle may not be smooth when accelerating at low speed. During this break-in period, the shift quality and performance of your new vehicle is continuously optimized.

# **A** 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 shift lever is in the P (Park) position, then set the parking brake, and place the ignition switch in the LOCK/OFF position. Unexpected and sudden vehicle movement can occur if these precautions are not followed
- Do not use the engine brake (shifting from a high gear to lower gear) rapidly on slippery roads. The vehicle may slip causing an accident.

#### NOTICE

- Always come to a complete stop before shifting into D (Drive) or R (Reverse).
- Do not put the shift lever in N (Neutral) while driving.

# **A** CAUTION

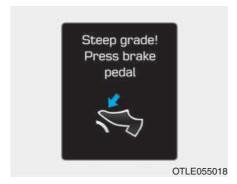
- To avoid damage to your transmission, do not try to accelerate in R (Reverse) or any forward gear position with the brakes applied.
- When stopped on a slope, do not hold the vehicle with accelerator pedal. Use the brake pedal or the parking brake.

#### A WARNING

Due to transmission failure, you may not continue to drive and the position indicator and the position indicator (D, P) on the instrument cluster will blink. We recommend that you contact an authorized HYUNDAI dealer and have the system checked.

# DCT warning messages

This warning message is displayed when vehicle is driven slowly on a grade and the vehicle detects that the brake pedal is not applied.



#### **Steep grade**

Driving up hills or on steep grades:

- To hold the vehicle on an incline use the foot brake or the parking brake.
- When in stop-and-go traffic on an incline, allow a gap to form ahead of you before moving the vehicle forward. Then hold the vehicle on the incline with the foot brake.

- If the vehicle is held or creeping forward on an incline by applying the accelerator pedal, the clutch and transmission may overheat which can result in damage. At this time, a warning message will appear on the LCD display.
- If the LCD warning is active, the foot brake must be applied.
- Ignoring the warnings can lead to damage to the transmission.

#### NOTICE

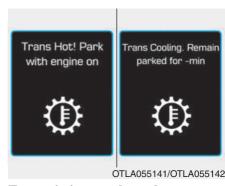
To hold the vehicle on a hill use the foot brake or the parking brake. If the vehicle is held by applying the accelerator pedal on a hill, the clutch and transmission will be overheated resulting in damage.



Transmission high temperature

- Under certain conditions, such as repeated stop-and-go launches on steep grades, sudden take off or acceleration, or other harsh driving conditions, the transmission clutch temperatures will increase excessively.
- When the clutch temperatures are too high, the "Transmission temp is high! Stop safely" warning message will appear on the LCD display, a chime will sound, and the transmission shifting may not be smooth.

- If this occurs, pull over to a safe location, stop the vehicle with the engine running, apply the brakes and shift the vehicle to P (Park), and allow the transmission to cool.
- If you ignore this warning, the driving condition may become worse. You may experience abrupt shifts, frequent shifts, or jerkiness.
- When the message "Trans cooled. Resume driving." appears you can continue to drive your vehicle.
- When possible, drive the vehicle smoothly.



#### Transmission overheated

- If the vehicle continues to be driven and the clutch temperatures reach the maximum temperature limit, the "Trans Hot! Park with engine on" warning will be displayed. When this occurs the clutch is disabled until the clutch cools to normal temperatures.
- The warning will display a time to wait for the transmission to cool.
- If this occurs, pull over to a safe location, stop the vehicle with the engine running, apply the brakes and shift the vehicle to P (Park), and allow the transmission to cool.

- When the message "Trans cooled. Resume driving." appears you can continue to drive your vehicle.
- When possible, drive the vehicle smoothly.

If any of the warning messages in the LCD display continue to blink, for your safety, we recommend that you contact an authorized HYUNDAI dealer and have the system checked.

# Shift lever position

The indicator in the instrument cluster displays the shift lever position when the ignition switch is in the ON position.

#### P (Park)

Always come to a complete stop before shifting into P (Park).

To shift from P (Park), you must depress firmly on the brake pedal and make sure your foot is off the accelerator pedal.

If you have done all of the above and still cannot shift the lever out of P (Park), see "Shift-Lock Release" in this chapter.

The shift lever must be in P (Park) before turning the vehicle off.

# **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 shift lever 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.
- When parking on an incline, place the shift lever in P (Park) and apply the parking brake to prevent the vehicle from rolling downhill.
- For safety, always engage the parking brake with the shift lever in the P (Park) position except for the case of emergency parking.

#### R (Reverse)

Use this position to drive the vehicle backward.

#### NOTICE

Always come to a complete stop before shifting into or out of R (Reverse); you may damage the transmission if you shift into R (Reverse) while the vehicle is in motion.

#### N (Neutral)

The wheels and transmission are not engaged.

#### **A** WARNING

Do not drive with the shift lever in N (Neutral). The engine brake will not work and lead to an accident.

#### D (Drive)

This is the normal driving position. The transmission will automatically shift through a 6-gear sequence, providing the best fuel economy and power.

For extra power when passing another vehicle or driving uphill, depress the accelerator fully. The transmission will automatically downshift to the next lower gear (or gears, as appropriate).

If you drive the vehicle with the shift lever in D (Drive), the vehicle will automatically change to ECO mode. The ECO indicator will illuminate on the instrument cluster.

When driving in ECO mode, the vehicle improves fuel efficiency for ecofriendly driving.

# **A** CAUTION

Depress the brake pedal fully to prevent unintended movement when stopping the vehicle.

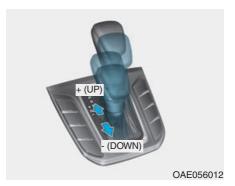
#### S (Sport)

If you drive the vehicle with the shift lever in S (Sport), the vehicle will automatically change to SPORT mode. The SPORT indicator will illuminate on the instrument cluster.

When driving in SPORT mode, the vehicle provides sporty but firm riding.

# Information

In SPORT mode, the fuel efficiency may decrease.



#### Manual shift mode

Whether the vehicle is stationary or in motion, manual shift mode is selected by pushing the shift lever from the D (Drive) position into the manual gate. To return to D (Drive) range operation, push the shift lever back into the main gate.

In manual shift mode, moving the shift lever backwards and forwards will allow you to make gearshifts rapidly.

- Up (+) : Push the lever forward once to shift up one gear.
- Down (-): Pull the lever backwards once to shift down one gear.

# i Information - For Plug-in hybrid vehicles

- If the vehicle is in Electric (CD) mode, and you shift from D (Drive) to S (Sport), the vehicle will change to SPORT mode. In SPORT mode, if you move the shift lever up (+) or down (-), the vehicle will enter manual shift mode.
- If the vehicle is in Hybrid (CS) mode, and you shift from D (Drive) to S (Sport), the vehicle will automatically enter manual shift mode.

# Information

- Only the six forward gears can be selected in Manual Shift Mode. To reverse or park the vehicle, move the shift lever to the R (Reverse) or P (Park) position as required.
- Downshifts are made automatically when the vehicle slows down. When the vehicle stops, 1st gear is automatically selected.
- When the engine rpm approaches the red zone the transmission will upshift automatically.
- If the driver presses the lever to + (Up) or - (Down) position, the transmission may not make the requested gear change if the next gear is outside of the allowable engine rpm range. The driver must execute upshifts in accordance with road conditions, taking care to keep the engine rpms below the red zone.
- When driving in manual shift mode, slow down before shifting to a lower gear. Otherwise, the lower gear may not be engaged if the engine rpms are outside of the allowable range.

#### Shift-lock system

For your safety, the dual clutch transmission has a shift-lock system which prevents shifting the transmission from P (Park) into R (Reverse) unless the brake pedal is depressed. To shift the transmission from P (Park) into R (Reverse):

- 1. Depress and hold the brake pedal.
- 2. Start the vehicle or place the ignition switch in the ON position.
- 3. Move the shift lever.

#### Shift-lock release

If the shift lever cannot be moved from the P (Park) position into R (Reverse) position with the brake pedal depressed, continue depressing the brake, and then do the following:



Type A

- 1. Place the ignition switch in the LOCK/OFF position.
- 2. Apply the parking brake.
- 3. Push the shift-lock release button.
- 4. Move the shift lever while pushing the shift-lock release button.
- 5. Stop pushing the shift-lock release button.
- 6. Depress the brake pedal, and then restart the vehicle.

If you need to use the shift-lock release, we recommend that the system be inspected by an authorized HYUNDAI dealer immediately.



# Type B

- 1. Place the ignition switch in the LOCK/OFF position.
- 2. Apply the parking brake.
- 3. Carefully remove the cap (1) covering the shift-lock access hole.
- Insert a tool (e.g. flathead screwdriver) into the access hole and press down on the tool.
- Move the shift lever while holding down the screwdriver.
- 6. Remove the tool from the shiftlock release access hole then install the cap.
- 7. Depress the brake pedal, and then restart the vehicle.

If you need to use the shift-lock release, we recommend that the system be inspected by an authorized HYUNDAI dealer immediately.

# Ignition key interlock system (if equipped)

The ignition key cannot be removed unless the shift lever is in the P (Park) position.

# Paddle shifter (if equipped)



The paddle shifter is functional when the shift lever is in the D (Drive) or S (Sport) position, or the manual shift mode.

The paddle shifter will operate when the vehicle speed is more than 5 km/h (3 mph).

Pull the [+] or [-] paddle shifter once to shift up or down one gear and the system changes from automatic mode to manual mode.

- The system changes from manual mode to automatic mode when
  - the vehicle speed is lower than 5 km/h (3 mph),
  - you depress the accelerator pedal for more than 5 seconds,
  - you pull the [+] paddle shifter for more than 1 second, or
  - you move the shift lever from D (Drive) to S (Sport) or manual shift mode (+, -) and then back to D (Drive).

# Information

If the [+] and [-] paddle shifters are pulled at the same time, gear shift may not occur.

# **Parking**

Always come to a complete stop and continue to depress the brake pedal. Move the shift lever into the P (Park) position, apply the parking brake, and place the ignition switch in the LOCK/OFF position. Take the Key with you when exiting the vehicle.

## **A** WARNING

When you stay in the vehicle with the engine running, be careful not to depress the accelerator pedal for a long period of time. The engine or exhaust system may overheat and start a fire.

The exhaust gas and the exhaust system are very hot. Keep away from the exhaust system components.

Do not stop or park over flammable materials, such as dry grass, paper or leaves. They may ignite and cause a fire.

# 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 because of a loss of engine braking and the transmission could be damaged.
- 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.

#### **A** WARNING

To reduce the risk of SERIOUS INJURY or DEATH:

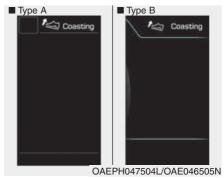
- ALWAYS wear your seat belt. In a collision, an unbelted occupant is significantly more likely to be seriously injured or killed than a properly belted occupant.
- Avoid high speeds when cornering or turning.
- Do not make quick steering wheel movements, such as sharp lane changes or fast, sharp turns.
- The risk of rollover is greatly increased if you lose control of your vehicle at highway speeds.
- Loss of control often occurs if two or more wheels drop off the roadway and the driver over steers to reenter the roadway.

(Continued)

## (Continued)

- 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.

# COASTING GUIDE (PLUG-IN HYBRID VEHICLE, IF EQUIPPED)



The coasting guide function informs the driver when to take the foot off from the accelerator by anticipating a decelerating event\* based on the analysis of driving routes and road conditions of the navigation. It encourages the driver to remove foot from the pedal and allow coasting down the road with EV motor only. This helps prevent unnecessary fuel consumption and increases fuel efficiency.

# Information

Example of a deceleration event is making a right/left turn, driving through a rotary, entering or exiting a highway (freeway), etc.

The driver can activate the coasting guide by placing the ignition switch in the ON position and by selecting:

User settings

User Settings  $\rightarrow$  Driving Assist  $\rightarrow$  Coasting Guide

For the explanation of the system, press and hold the [OK] button.

#### Operation conditions

To activate the system, take the following procedures. Enter your destination information on the navigation and select the driving route. Have the vehicle in ECO mode by driving the vehicle in D (Drive). Then, satisfy the following.

 The driving speed should be between 40 km/h (25 mph) and 160 km/h (100 mph).

# Information

The operating speed may vary due to difference between instrument cluster and navigation effected by tire inflation level.

# *i* Information

Coasting guide is only a supplemental system to assist with fuel-efficient driving. Thus, the operating conditions may be different in accordance with traffic/road conditions (i.e. driving in a traffic jam, driving on a slope, driving on a curve). Thus, take the actual driving conditions into consideration, such as distances from the vehicles ahead/ behind, while referring to the coasting guide system as guidance.

#### **BRAKING SYSTEM**

#### **Power brakes**

Your vehicle has power-assisted brakes that adjust automatically through normal usage.

If the vehicle is not in the ready ( ) mode or the vehicle is turned off while driving, the power assist for the brakes will not work. You can still stop your vehicle by applying greater force to the brake pedal than typical. The stopping distance, however, will be longer than with power brakes.

When the vehicle is not in the ready ( ) mode, the reserve brake power is partially depleted each time the brake pedal is applied. Do not pump the brake pedal when the power assist has been interrupted.

Pump the brake pedal only when necessary to maintain steering control on slippery surfaces.

## **A** WARNING

Take the following precautions:

- Do not drive with your foot resting on the brake pedal. This will create abnormal high brake temperatures, excessive brake lining and pad wear, and increased stopping distances.
- When descending down a long or steep hill, move the shift lever to Manual Shift mode and manually downshift to a lower gear in order to control your speed without using the brake pedal excessively. Applying the brakes continuously will cause the brakes to overheat and could result in a temporary loss of braking performance.

(Continued)

# (Continued)

 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.

Note that some driving conditions or climates may cause a brake squeal when you first apply (or lightly apply) the brakes. This is normal and does not indicate a problem with your brakes.

#### NOTICE

To avoid costly brake repairs, do not continue to drive with worn brake pads.

# i Information

Always replace brake pads as complete front or rear axle sets.

## **Parking brake**

## Applying the parking brake

Always set the parking brake before leaving the vehicle.



To apply the parking brake:
Firmly depress the brake pedal.
Depress the parking brake pedal down as far as possible.

# **A** WARNING

To reduce the risk of SERIOUS INJURY or DEATH, do not operate the parking brake while the vehicle is moving except in an emergency situation. It could damage the brake system and lead to an accident.

# Releasing the parking brake



To release the parking brake:

Firmly depress the brake pedal.

Depress the parking brake pedal down and it will release automatically.

If the parking brake does not release or does not release all the way, we recommend that you have your vehicle checked by an authorized HYUNDAI dealer.

## **⚠** 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 P (Park) position, then apply the parking brake, and place the ignition switch in the LOCK/ OFF position.

Vehicles with the parking brake not fully engaged are at risk for moving inadvertently and causing injury to yourself or others.

- When parking on an incline, block the wheels to prevent the vehicle from rolling down.
- 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.
- Only release the parking brake when you are seated inside the vehicle with your foot firmly on the brake pedal.

#### NOTICE

- Do not apply the accelerator pedal while the parking brake is engaged. If you depress the accelerator pedal with the parking brake engaged, a warning will sound. Damage to the parking brake may occur.
- Driving with the parking brake on can overheat the braking system and cause premature wear or damage to brake parts. Make sure the parking brake is released and the Brake Warning Light is off before driving.



Check the Parking Brake Warning Light by placing the ignition switch to the ON position vehicle not in the ready ( ) mode.

This light will be illuminated when the parking brake is applied with the ignition switch 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.

## **Anti-lock Brake System (ABS)**

## **A** WARNING

An Anti-Lock Braking System (ABS) or an Electronic Stability Control (ESC) system will not prevent accidents due improper or dangerous driving maneuvers. Even though vehicle control is improved during emergency braking, always maintain a safe distance between you and objects ahead of you. Vehicle speeds should always be reduced during extreme road conditions. The braking distance for cars equipped with ABS or ESC may be longer than for those without these systems in the following road conditions

Drive your vehicle at reduced speeds during the following conditions:

Rough, gravel or snow-covered roads.

(Continued)

## (Continued)

- On roads where the road surface is pitted or has different surface height.
- Tire chains are installed on your vehicle.

The safety features of an ABS or ESC equipped vehicle should not be tested by high speed driving or cornering. This could endanger the safety of yourself or others.

ABS is an electronic braking system that helps prevent a braking skid. ABS allows the driver to steer and brake at the same time.

# Using ABS

To obtain the maximum benefit from your ABS in an emergency situation, do not attempt to modulate your brake pressure and do not try to pump your brakes. Depress your brake pedal as hard as possible.

When you apply your brakes under conditions which may lock the wheels, you may hear sounds from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ABS is active.

ABS does not reduce the time or distance it takes to stop the vehicle.

Always maintain a safe distance from the vehicle in front of you.

ABS will not prevent a skid that results from sudden changes in direction, such as trying to take a corner too fast or making a sudden lane change. Always drive at a safe speed for the road and weather conditions.

ABS cannot prevent a loss of stability. Always steer moderately when braking hard. Severe or sharp steering wheel movement can still cause your vehicle to veer into oncoming traffic or off the road.

On loose or uneven road surfaces, operation of the anti-lock brake system may result in a longer stopping distance than for vehicles equipped with a conventional brake system.

The ABS warning light ((\*\*\*)) will stay on for several seconds after the ignition switch is in the ON position. During that time, the ABS will go through self-diagnosis and the light will go off if everything is normal. If the light stays on, you may have a problem with your ABS. We recommend that you contact an authorized HYUNDAI dealer as soon as possible.

#### **A** WARNING

If the ABS warning light (((as)) 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, we recommend that you contact your HYUNDAI dealer as soon as possible.

#### NOTICE

When you drive on a road having poor traction, such as an icy road, and apply your brakes continuously, the ABS will be active continuously and the ABS warning light ((ABS)) may illuminate. Pull your car over to a safe place and turn the vehicle off.

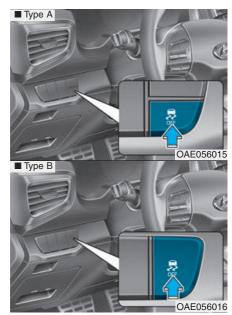
Restart the vehicle. If the ABS warning light is off, then your ABS system is normal.

Otherwise, you may have a problem with your ABS system. We recommend that you contact an authorized HYUNDAI dealer as soon as possible.

# i Information

When you jump start your vehicle because of a drained battery, the ABS warning light ((ass)) 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 engine management 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.

## **A 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 ignition switch is in the ON position, the ESC and the ESC OFF indicator lights illuminate for approximately three seconds. After both lights go off, the ESC is enabled.

#### When operating



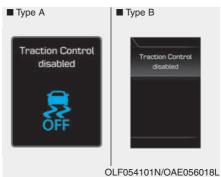
When the ESC is in operation, the ESC indicator light blinks:

- When you apply your brakes under conditions which may lock the wheels, you may hear sounds from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your ESC is active.
- When the ESC activates, the vehicle may not respond to the accelerator as it does under routine conditions.
- If the Cruise Control was in use when the ESC activates, the Cruise Control automatically disengages.
   The Cruise Control can be reengaged when the road conditions allow. See "Cruise Control System" later in this chapter. (if equipped)
- When moving out of the mud or driving on a slippery road, the engine rpm (revolutions per minute) may not increase even if you press the accelerator pedal deeply. This is to maintain the stability and traction of the vehicle and does not indicate a problem.

#### **ESC OFF condition**

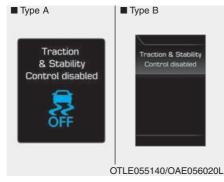
To cancel ESC operation :

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 (engine management) is disabled, but the brake control function of ESC (braking management) still operates.

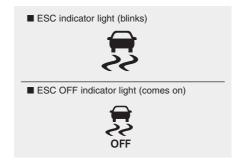
• State 2



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 (engine management) and the brake control function of ESC (braking management) are disabled.

If the ignition switch 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 ignition switch is pressed to the ON position, the ESC indicator light illuminates, then goes off if the ESC system is operating normally.

The ESC indicator light blinks whenever the ESC is operating.

If the ESC indicator light stays on, your vehicle may have a malfunction with the ESC system. When this warning light illuminates we recommend that the vehicle be checked by an authorized HYUNDAI dealer as soon as possible.

The ESC OFF indicator light comes on when the ESC is turned off with the button.

## **A** WARNING

When the ESC is blinking, this indicates the ESC is active:

Drive slowly and NEVER attempt to accelerate. NEVER turn the ESC off while the ESC indicator light is blinking or you may lose control of the vehicle resulting in an accident.

#### NOTICE

Driving with wheels and tires with different sizes may cause the ESC system to malfunction. Before replacing tires, make sure all four tires and wheels are the same size. Never drive the vehicle with different sized wheels and tires installed.

## ESC OFF usage

When Driving

The ESC OFF mode should only be used briefly to help free the vehicle if stuck in snow or mud, by temporarily stopping operation of the ESC, to maintain wheel torque.

To turn ESC off while driving, press the ESC OFF button while driving on a flat road surface.

#### NOTICE

To prevent damage to the transmission:

- Do not allow wheel(s) of one axle to spin excessively while the ESC, ABS, and parking brake warning lights are displayed. The repairs would not be covered by the vehicle warranty. Reduce engine power and do not spin the wheel(s) excessively while these lights are displayed.
- When operating the vehicle on a dynamometer, make sure the ESC is turned off (ESC OFF light illuminated).

# Information

Turning the ESC off does not affect ABS or standard brake system operation.

# Vehicle Stability Management (VSM)

The Vehicle Stability Management (VSM) is a function of the Electronic Stability Control (ESC) system. It helps ensure the vehicle stays stable when accelerating or braking suddenly on wet, slippery and rough roads where traction over the four tires can suddenly become uneven.

# **A** WARNING

Take the following precautions when using the Vehicle Stability Management (VSM):

- ALWAYS check the speed and the distance to the vehicle ahead. The VSM is not a substitute for safe driving practices.
- Never drive too fast for the road conditions. The VSM system will not prevent accidents. Excessive speed in bad weather, slippery and uneven roads can result in severe accidents.

#### VSM operation

**VSM ON condition** 

The VSM operates when:

- The Electronic Stability Control (ESC) is on.
- Vehicle speed is approximately above 15 km/h (9 mph) on curve roads.
- Vehicle speed is approximately above 20 km/h (12 mph) when the vehicle is braking on rough roads.

#### When operating

When you apply your brakes under conditions which may activate the ESC, you may hear sounds from the brakes, or feel a corresponding sensation in the brake pedal. This is normal and it means your VSM is active.

# **i** Information

The 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.

#### **VSM OFF condition**

To cancel VSM operation, press the ESC OFF button. ESC OFF indicator light (  $\frac{1}{8}$  ) will illuminate.

To turn on VSM, press the ESC OFF button again. The ESC OFF indicator light will go out.

## **A** WARNING

If the ESC indicator light (\$\overline{\mathcal{Z}}\$) or EPS warning light (\$\overline{\mathcal{Z}}\$!) stays on or blinks, your vehicle may have a malfunction with the VSM system. When the warning light illuminates we recommend that the vehicle be checked by an authorized HYUNDAI dealer as soon as possible.

#### NOTICE

Driving with wheels and tires with different sizes may cause the ESC system to malfunction. Before replacing tires, make sure all four tires and wheels are the same size. Never drive the vehicle with different sized tires and wheels installed.

## **Hill-Start Assist Control (HAC)**

A vehicle has the tendency to slide backwards on a steep slope, before depressing the accelerator after a stop. The HAC prevents the vehicle from sliding backwards by automatically operating the brake systems for about 2 seconds. The brake systems are automatically released, when the accelerator pedal is depressed.

## **A** WARNING

The HAC is activated only for about 2 seconds, so always depress the accelerator pedal to begin driving upwards after a stop.

# Information

- The HAC does not operate when the shift lever is in P (Park) or N (Neutral).
- The HAC activates even when the ESC (Electronic Stability Control) is off. However, it does not activate, when the ESC does not operate normally.

# Emergency Stop Signal (ESS) (if equipped)

The Emergency Stop Signal system alerts the driver behind by blinking the stop lights, while sharply and severely braking.

The system is activated when:

- The vehicle suddenly stops. (The deceleration power exceeds 7 m/s², and the driving speed exceeds 55 km/h (34 mph).)
- · The ABS is activated.

The hazard warning flasher automatically turns ON after blinking the stop lights:

- When the driving speed is under 40 km/h (25 mph),
- · When the ABS is deactivated, and
- When the sudden braking situation is over.

The hazard warning flasher turns OFF:

 When the vehicle drives at a low speed for a certain period of time.
 The driver can manually turn OFF the hazard warning flasher by pressing the button.

# *i* Information

The Emergency Stop Signal (ESS) system will not work if the hazard warning flashers are already on.

## **Good braking practices**

#### **A** 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 ignition switch 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.

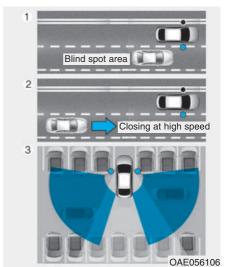
To dry the brakes, apply the brakes lightly until the braking action returns to normal. If the braking action does not return to normal, stop as soon as it is safe to do so and we recommend that you call an authorized HYUNDAI dealer for assistance.

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.

## BLIND SPOT DETECTION SYSTEM (BSD) (IF EQUIPPED)



The Blind Spot Detection System (BSD) uses radar sensors in the rear bumper to monitor and warn the driver of an approaching vehicle in the driver's blind spot area.

The system monitors the rear area of the vehicle and provides information to the driver with an audible alert and an indicator on the outside rearview mirrors. (1) BSD (Blind Spot Detection)

The blind spot detection range varies relative to vehicle speed. Note that if your vehicle is traveling much faster than the vehicles around you, the warning will not occur.

(2) LCA (Lane Change Assist)

The Lane Change Assist feature will alert you when a vehicle is approaching in an adjacent lane at a high rate of speed. If the driver activates the turn signal when the system detects an oncoming vehicle, the system sounds an audible alert.

The time of alert varies according to the speed difference between you and the approaching vehicle.

(3) RCTA (Rear Cross Traffic Alert)

The Rear Cross Traffic Alert feature monitors approaching cross traffic from the left and right side of the vehicle when your vehicle is in reverse. The feature will operate when the vehicle is moving in reverse below about 10 km/h (6 mph). If oncoming cross traffic is detected a warning chime will sound.

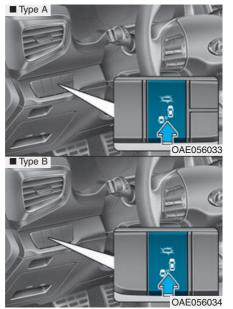
The time of alert varies according to the speed difference between you and the approaching vehicle.

## **A** WARNING

- Always be aware of road conditions while driving and be alert for unexpected situations even though the Blind Spot Detection System is operating.
- The Blind Spot Detection System (BSD) is not a substitute for proper and safe driving. Always drive safely and use caution when changing lanes or backing up the vehicle. The Blind Spot Detection System (BSD) may not detect every object alongside the vehicle.

# BSD (Blind Spot Detection) / LCA (Lane Change Assist) (if equipped)

## Operating conditions



#### To operate:

Press the BSD switch with the ignition switch in the ON position.

The indicator on the BSD switch will illuminate. When the vehicle speed exceeds 30 km/h (20 mph), the system will be activated.

#### To cancel:

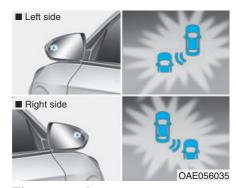
Press the BSD switch again. The indicator on the switch will go off. When the system is not used, turn the system off by turning off the switch.

# **i** Information

- If the vehicle is turned off then on again, the BSD system returns to the previous state.
- When the system is turned on, the warning light will illuminate for 3 seconds on the outside rearview mirror.

The function will activate when:

- 1. The system is on.
- 2. The vehicle speed is above approximately 30 km/h (20 mph).
- An oncoming vehicle is detected in the blind spot area.



First stage alert

If a vehicle is detected within the boundary of the system, a warning light (yellow) will illuminate on the outside rearview mirror.

Once the detected vehicle is no longer within the blind spot area, the warning will turn off depending on the driving conditions of the vehicle.



Second stage alert

A warning chime to alert the driver will activate when:

- 1. A vehicle has been detected in the blind spot area by the radar system (the warning light will illuminate on the outside rearview mirror (i.e., in the first stage alert)) AND
- 2. The turn signal is applied (same side as where the vehicle is being detected).

When this alert is activated, the warning light on the outside rearview mirror will also blink.

If you turn off the turn signal indicator, the second stage alert (warning chime and blinking warning light on the outside rearview mirror) will be deactivated.

- The second stage alarm may be deactivated.
  - To deactivate the warning chime:

#### Cluster type A

Go to the 'User Settings → Driving Assist → Rear Collision Warning and deselect Blind Spot Detection Sound' on the LCD display.

#### Cluster type B

Go to the 'User Settings → Driving Assist and deselect Blind Spot Detection Sound' on the LCD display.

# Information

The warning chime function helps alert the driver. Deactivate this function only when it is necessary. For more information, refer to "LCD Display Modes" in chapter 3.

- To activate the warning chime:

#### Cluster type A

Go to the 'User Settings → Driving Assist → Rear Collision Warning and select Blind Spot Detection Sound' on the LCD display.

## Cluster type B

Go to the 'User Settings → Driving Assist and select Blind Spot Detection Sound' on the LCD display.

## **RCTA (Rear Cross Traffic** Alert) (if equipped)



OAF056106

The Rear Cross Traffic Alert function monitors approaching cross traffic from the left and right side of the vehicle when your vehicle is in reverse.

#### Operating conditions

To operate:

#### Cluster type A

Go to the 'User Settings  $\rightarrow$  Driving Assist  $\rightarrow$  Rear Collision Warning and select Rear Cross Traffic Alert' on the LCD display.

## Cluster type B

Go to the 'User Settings  $\rightarrow$  Driving Assist and select Rear Cross Traffic Alert' on the LCD display.

The system will turn on and standby to activate. The system will activate when vehicle speed is below 10 km/h (6.2 mph) and with the shift lever in R (Reverse).

If the function is deselected from the instrument cluster, the function will deactivate.

For more information, refer to "LCD Display Modes" in chapter 3.

# *i* Information

- The last selected setting (ON or OFF) of the RCTA is remained in the system.
- The system will activate when vehicle speed is below 10 km/h (6.2 mph) and with the shift lever in R (Reverse).
- The Rear Cross Traffic Alert (RCTA) detecting range is approximately 0.5 m ~ 20 m (1 ft ~ 65 ft) in the direction of both lateral sides of the vehicle.

An approaching vehicle will be detected if their vehicle speed is within 4 km/h  $\sim$ 36 km/h (2.5  $\sim$  22.5 mph).

Note that the detecting range may vary under certain conditions. As always, use caution and pay close attention to your surroundings when backing up your vehicle.

# Warning type



If the vehicle detected by the sensors approaches your vehicle, the warning chime will sound, the warning light on the outside rearview mirror will blink and a message will appear on the LCD display.

OAF0561511 /OAF0560471

# **i** Information

- The warning chime will turn off when:
  - The detected vehicle moves out of the sensing area or
  - when the vehicle is right behind your vehicle or
  - when the vehicle is not approaching your vehicle or
  - when the other vehicle slows down.
- The system may not operate properly due to other factors or circumstances. Always pay attention to your surroundings.
- If the sensing area near the rear bumper is blocked by either a wall or barrier or by a parked vehicle, the system sensing area may be reduced.

## **A** WARNING

 With the system activated, the warning light on the outside rearview mirror will illuminate whenever a vehicle is detected at the rear side by the system.

To avoid accidents, do not focus only on the warning light and neglect to see the surrounding of the vehicle.

 Drive safely even though the vehicle is equipped with a Blind Spot Detection System (BSD) and Rear Cross Traffic Alert (RCTA). Do not solely rely on the system but check your surrounding before changing lanes or backing the vehicle up.

The system may not alert the driver in some conditions so always check your surroundings while driving.

(Continued)

# (Continued)

 The Blind Spot Detection System (BSD) and Rear Cross Traffic Alert (RCTA) are not a substitute for proper and safe driving practices. Always drive safely and use caution when changing lanes or backing up your vehicle. The Blind Spot Detection System (BSD) may not detect every object alongside the vehicle.

#### NOTICE

- The system may not work properly when the bumper has been damaged, or if the rear bumper has been replaced or repaired.
- The sensing range differs somewhat according to the width of the road. When the road is narrow, the system may detect other vehicles in the next lane Or when the road is wide, the system may not detect other vehicles in the next lane.
- The system may turn off due to strong electromagnetic waves.

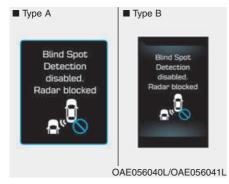
# **Detecting sensor**



The sensors are located inside the rear bumper.

Always keep the rear bumper clean for proper operation of the system.

#### Warning message



Blind Spot Detection disabled. Radar blocked.

This warning message may appear when:

- One or both of the sensors on the rear bumper is blocked by dirt or snow or a foreign object.
- Driving in rural areas where the BSD sensor does not detect another vehicle for an extended period of time.
- When there is inclement weather such as heavy snow or rain.
- A trailer or carrier is installed. (To use the BSD system, remove the trailer or carrier from your vehicle.)

If any of these conditions occur, the light on the BSD switch and the system will turn off automatically.

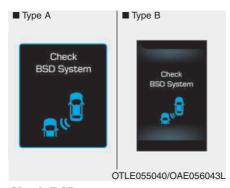
When the BSD cancelled warning message is displayed in the cluster, check to make sure that the rear bumper is free from any dirt or snow in the areas where the sensor is located. Remove any dirt, snow, or foreign material that could interfere with the radar sensors.

After any dirt or debris is removed, the BSD system should operate normally after about 10 minutes of driving the vehicle.

If the system still does not operate normally we recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

# Information

Turn off the system by pressing the BSD switch and deselecting Rear Cross Traffic Alert from the User Settings mode on the cluster when using a trailer or carrier behind your vehicle.



## **Check BSD system**

If there is a problem with the BSD system, a warning message will appear and the light on the switch will turn off. The system will turn off automatically. We recommend that you have your vehicle inspected by an authorized HYUNDAI dealer.

# **Limitations of the system**

The driver must be cautious in the below situations, because the system may not detect other vehicles or objects in certain circumstances.

- When a trailer or carrier is installed.
- The vehicle drives in inclement weather such as heavy rain or snow.
- The sensor is polluted with rain, snow, mud, etc.
- The rear bumper where the sensor is located is covered with a foreign object such as a bumper sticker, a bumper guard, a bike rack, etc.
- The rear bumper is damaged, or the sensor is out of the original default position.
- The vehicle height gets lower or higher due to heavy loading in the luggage compartment, abnormal tire pressure, etc.
- When the temperature near the rear bumper area is high or low.

- When the sensors are blocked by other vehicles, walls or parking-lot pillars.
- The vehicle drives on a curved road or through a tollgate.
- The vehicle is driven near areas containing metal substances such as a construction zone, railroad, etc.
- There is a fixed object near the vehicle, such as a guardrail, person, animal, etc.
- While going down or up a steep road where the height of the lane is different.
- When driving through a narrow road with many trees or bushes.
- When driving on wet surfaces.
- When driving through a large area with few vehicles or structures around, such as a desert, rural area, etc.
- A big vehicle is near such as a bus or truck.
- When other vehicles are close to your vehicle.
- When the other vehicle approaches very close.

- When the detected vehicle also moves back, as your vehicle drives back.
- While changing lanes.
- The vehicle is turning left or right at a crossroad.
- If the vehicle has started at the same time as the vehicle next to you and has accelerated.
- When the other vehicle passes at a very fast speed.
- When the vehicle in the next lane moves two lanes away from you OR when the vehicle two lanes away moves to the next lane to you.
- A motorcycle or bicycle is near.
- A flat trailer is near.
- If there are small objects in the detecting area such as a shopping cart or a baby stroller.
- If there is a low height vehicle such as a sports car.

## Non-operating condition

The BSD indicator on the outside rearview mirror may not illuminate properly when:

- The outside rearview mirror housing is damaged.
- The mirror is covered with dirt, snow, or debris.
- The window is covered with dirt, snow, or debris.
- · The window is tinted.

# AUTONOMOUS EMERGENCY BRAKING (AEB) (IF EQUIPPED)

The Autonomous Emergency Braking (AEB) system is designed to help detect and monitor the vehicle ahead or detect a pedestrian (if equipped) in the roadway through radar signals and camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

#### **A** WARNING

Take the following precautions when using the Autonomous Emergency Braking (AEB):

- This system is only a supplemental system and it is not intended to, nor does it replace the need for extreme care and attention of the driver. The sensing range and objects detectable by the sensors are limited. Pay attention to the road conditions at all times.
- NEVER drive too fast in accordance with the road conditions or while cornering.
- Always drive cautiously to prevent unexpected and sudden situations from occurring. AEB does not stop the vehicle completely and is not a collision avoidance system.

# System setting and activation System setting



 The driver can activate the AEB by placing the ignition switch to the ON position and by selecting:

#### Cluster type A

'User Settings → Driving Assist → Forward Collision Warning → Autonomous Emergency Braking'

#### Cluster type B

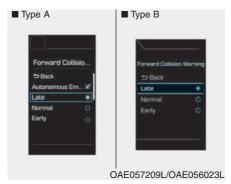
'User Settings → Driving Assist → Autonomous Emergency Braking'

The AEB deactivates, when the driver cancels the system setting.



The warning light illuminates on the LCD display, when you cancel the AEB system. The driver can

monitor the AEB ON/OFF status on the LCD display. Also, the warning light illuminates when the ESC (Electronic Stability Control) is turned off. If the warning light remains ON when the AEB is activated, we recommend you to have the system checked by an authorized HYUNDAI dealer.



 The driver can select the initial warning activation time on the LCD display.

Go to the 'User Settings → Driving Assist → Forward Collision Warning → Late/Normal/Early'.

The options for the initial Forward Collision Warning includes the following:

- Early:

When this condition is selected, the initial Forward Collision Warning is activated earlier than normal. This setting maximizes the amount of distance between the vehicle or pedestrian ahead before the initial warning occurs.

Even though, 'Early' is selected if the front vehicle suddenly stops the initial warning activation time may not seem fast.

- Normal:

When this condition is selected, the initial Forward Collision Warning is activated normally. This setting allows for a nominal amount of distance between the vehicle or pedestrian ahead before the initial warning occurs.

- Late:

When this condition is selected, the initial Forward Collision Warning is activated later than normal. This setting reduces the amount of distance between the vehicle or pedestrian ahead before the initial warning occurs.

Select 'Late' when traffic is light and when driving speed is slow.

## Prerequisite for activation

The AEB gets ready to be activated, when the AEB is selected on the LCD display, and when the following prerequisites are satisfied.

- The ESC (Electronic Stability Control) is on.
- Vehicle speed is over 10 km/h (6 mph). (The AEB is only activated within a certain speed range.)
- The system detects a pedestrian or a vehicle in front, which may collide with your vehicle. (The AEB may not be activated or may sound a warning alarm in accordance with the driving situation or vehicle condition.)

# **▲** WARNING

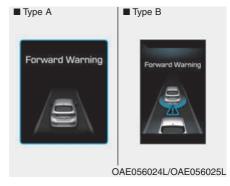
- Completely stop the vehicle on a safe location before operating the switch on the steering wheel to activate /deactivate the AEB system.
- The AEB automatically activates when the ignition switch is in the ON position. The driver can deactivate the AEB by canceling the system setting on the LCD display.
- If you cancel the ESC (Electronic Stability Control) when the AEB system is turned on the AEB automatically deactivates and the AEB warning light illuminates. When the ESC is cancelled the AEB cannot be activated on the LCD display.

# AEB warning message and system control

The AEB produces warning messages and warning alarms in accordance with the collision risk levels, such as abrupt stopping of the vehicle in front, insufficient braking distance, or pedestrian detection. Also, it controls the brakes in accordance with the collision risk levels.

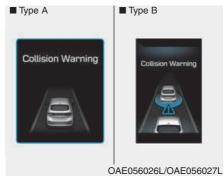
The driver can select the initial warning activation time in the User Settings in the LCD display. The options for the initial Forward Collision Warning include Early, Normal or Late initial warning time.

## Forward Warning (1st warning)



This initial warning message appears on the LCD display with a warning chime.

# Collision Warning (2<sup>nd</sup> warning)



This warning message appears on the LCD display with a warning chime. Additionally, some vehicle system intervention occurs by the engine management system to help decelerate the vehicle.

- Your vehicle speed may decelerate moderately.
- The AEB system limitedly controls the brakes to preemptively mitigate impact in a collision.

# Emergency braking (3<sup>rd</sup> warning)



This warning message appears on the LCD display with a warning chime.

Additionally, some vehicle system intervention occurs by the engine management system to help decelerate the vehicle.

- The AEB system limitedly controls the brakes to preemptively mitigate impact in a collision. The brake control is maximized just before a collision.

## Brake operation

- In an urgent situation, the braking system enters into the ready status for prompt reaction against the driver's depressing the brake pedal.
- The AEB provides additional braking power for optimum braking performance, when the driver depresses the brake pedal.
- The braking control is automatically deactivated, when the driver sharply depresses the accelerator pedal, or when the driver abruptly operates the steering wheel.
- The AEB brake control is automatically cancelled, when risk factors disappear.

# **A** CAUTION

The driver should always use extreme caution while operating the vehicle, whether or not there is a warning message or alarm from the AEB system.

#### **A** WARNING

The braking control cannot completely stop the vehicle nor avoid all collisions. The driver should hold the responsibility to safely drive and control the vehicle.

## A WARNING

The AEB system logic operates within certain parameters, such as the distance from the vehicle or pedestrian ahead, the speed of the vehicle ahead, and the driver's vehicle speed. Certain conditions such as inclement weather and road conditions may affect the operation of the AEB system.

#### A WARNING

Never deliberately drive dangerously to activate the system.

#### **AEB** sensor



In order for the AEB system to operate properly, always make sure the sensor cover or sensor is clean and free of dirt, snow, and debris. Dirt, snow, or foreign substances on the sensor cover or sensor may adversely affect the sensing performance of the sensor.

#### NOTICE

- 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 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 AEB system may not operate correctly. In this case, a warning message may not be displayed. We recommend that you have the vehicle inspected by an authorized HYUNDAI dealer.

(Continued)

### (Continued)

- If the front bumper becomes damaged in the area around the radar sensor, the AEB system may not operate properly. We recommend that you have the vehicle inspected by authorized HYUNDAI.
- Use only genuine parts to repair or replace a damaged sensor or sensor cover. Do not apply paint to the sensor cover.

#### NOTICE

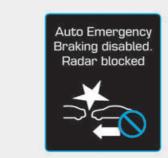
- NEVER install any accessories or stickers on the front windshield, nor tint the front windshield.
- NEVER locate any reflective objects (i.e. white paper, mirror) over the dashboard. Any light reflection may cause a malfunction of the system.
- Pay extreme caution to keep the camera out of water.
- NEVER arbitrarily disassemble the camera assembly, nor apply any impact on the camera assembly.
- Playing the vehicle audio system at high volume may offset the system warning sounds.

# *i* Information

We recommend you have the system checked by an authorized HYUNDAI dealer when:

- The windshield glass is replaced.
- The front bumper is replaced.
- The radar sensor or cover gets damaged or replaced.

# Warning message and warning light



OAE056031L

**Auto Emergency Braking disabled.** Radar blocked

When the sensor cover is blocked with dirt, snow, or debris, the AEB system operation may stop temporarily. If this occurs, a warning message will appear on the LCD display.

Remove any dirt, snow, or debris and clean the radar sensor cover before operating the AEB system.

The AEB may not properly operate in an area (e.g. open terrain), where any substances are not detected after turning ON the engine.

# System malfunction



#### **Check AEB system**

- When the AEB is not working properly, the AEB warning light (ﷺ) will illuminate and the warning message will appear for a few seconds. After the message disappears, the master warning light (⚠) will illuminate. In this case, we recommend you to have the vehicle inspected by an authorized HYUNDAI dealer.
- The AEB warning message may appear along with the illumination of the ESC (Electronic Stability Control) warning light.

## **A** WARNING

- The AEB is only a supplemental system for the driver's convenience. The driver should hold the responsibility to control the vehicle operation. Do not solely depend on the AEB system. Rather, maintain a safe braking distance, and, if necessary, depress the brake pedal to reduce the driving speed.
- In certain instances and under certain driving conditions, the AEB system may unintentionally activate. This initial warning message appears on the LCD display with a warning chime.

Also, in certain instances the front radar sensor or camera recognition system may not detect the vehicle or pedestrian ahead. The AEB system may not activate and the warning message will not be displayed.

(Continued)

# (Continued)

- If there is a malfunction with the AEB system, the autonomous emergency braking is not applied even though the braking system is operating normally.
- If the vehicle in front stops suddenly, you may have less control of the brake system.
   Therefore, always keep a safe distance between your vehicle and the vehicle in front of you.
- The AEB system may activate during braking and the vehicle may stop suddenly shifting loose objects toward the passengers. Always keep loose objects secured.
- The AEB system may not activate if the driver applies the brake pedal to avoid a collision.
- The brake control may be insufficient, possibly causing a collision, if a vehicle in front abruptly stops. Always pay extreme caution.

(Continued)

### (Continued)

 Occupants may get injured, if the vehicle abruptly stops by the activated AEB system. Pay extreme caution.

# **A** WARNING

- The AEB system operates only to detect vehicles or pedestrians in front of the vehicle.
- The AEB system does not operate when the vehicle is in reverse.
- The AEB system is not designed to detect other objects on the road such as animals.
- The AEB system does not detect vehicles in the opposite lane.
- The AEB system does not detect cross traffic vehicles that are approaching.
- The AEB system cannot detect the driver approaching the side view of a parked vehicle (for example on a dead end street.)

In these cases, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce the driving speed in order to maintain a safe distance.

# Limitations of the system

The Autonomous Emergency Braking (AEB) system is designed to monitor the vehicle ahead or a pedestrian in the roadway through radar signals and camera recognition to warn the driver that a collision is imminent, and if necessary, apply emergency braking.

In certain situations, the radar sensor or the camera may not be able to detect the vehicle or pedestrian ahead. In these cases, the AEB system may not operate normally. The driver must pay careful attention in the following situations where the AEB operation may be limited.

## Detecting vehicles

The sensor may be limited when:

- The radar sensor or camera is blocked with a foreign object or debris
- Inclement weather such as heavy rain or snow obscures the field of view of the radar sensor or camera
- There is interference by electromagnetic waves
- There is severe irregular reflection from the radar sensor
- The radar/camera sensor recognition is limited
- The vehicle in front is too small to be detected (for example a motorcycle or a bicycle, etc.)
- The vehicle in front is an oversize vehicle or trailer that is too big to be detected by the camera recognition system (for example a tractor trailer, etc.)
- The driver's field of view is not well illuminated (either too dark or too much reflection or too much backlight that obscures the field of view)

- The vehicle in front does not have their rear lights properly turned ON
- The outside brightness changes suddenly, for example when entering or exiting a tunnel
- Light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road
- The field of view in front is obstructed by sun glare
- The windshield glass is fogged up; a clear view of the road is obstructed
- The vehicle in front is driving erratically
- The vehicle is on unpaved or uneven rough surfaces, or roads with sudden gradient changes
- The adverse road conditions cause excessive vehicle vibrations while driving
- The vehicle is moving under ground level or inside a building
- The vehicle is driven near areas containing metal substances such as a construction zone, railroad, etc.

- The vehicle in front is moving vertically to the driving direction
- The vehicle in front is stopped vertically
- The vehicle in front is driving towards your vehicle or reversing



- Driving on a curve

The performance of the AEB system may be limited when driving on a curved road.

In certain instances on a curved road, the AEB system may activate prematurely.

Also, in certain instances the front radar sensor or camera recognition system may not detect the vehicle traveling on a curved road.

In these cases, 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.



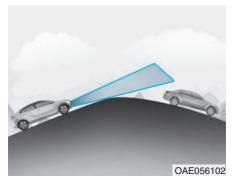
The AEB system may recognize a vehicle in the next lane when driving on a curved road.

In this case, the system may unnecessarily alarm the driver and apply the brake.

Always pay attention to road and driving conditions, while driving. If necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.

Also, when necessary depress the accelerator pedal to prevent the system from unnecessarily decelerating your vehicle.

Check the surrounding traffic conditions before use.

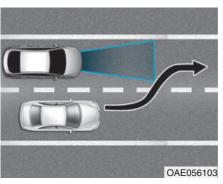


- Driving on a slope

The performance of the AEB decreases while driving upward or downward on a slope, not recognizing the vehicle in front in the same lane. It may unnecessarily produce the warning message and the warning alarm, or it may not produce the warning message and the warning alarm at all.

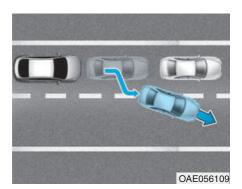
When the AEB suddenly recognizes the vehicle in front while passing over a slope, you may experience sharp deceleration.

Always keep your eyes forward while driving upward or downward on a slope, and, if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.



- Changing lanes

When a vehicle changes lanes in front of you, the AEB system may not immediately detect the vehicle, especially if the vehicle changes lanes abruptly. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, the AEB system may not immediately detect the new vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



- Detecting the vehicle in front of you If the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance, additional special attention is required. The AEB system may not be able to detect the cargo extending from the vehicle. In these instances, you must maintain a safe braking distance from the rearmost object, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain distance.

# Detecting pedestrians (if equipped)

The sensor may be limited when:

- The pedestrian is not fully detected by the camera recognition system, for example, if the pedestrian is leaning over or is not fully walking upright
- The pedestrian is moving very quickly or appears abruptly in the camera detection area
- The pedestrian is wearing clothing that easily blends into the background, making it difficult to be detected by the camera recognition system
- It is difficult to detect and distinguish the pedestrian from other objects in the surroundings, for example, when there is a group of pedestrians or a large crowd
- There is an item similar to a person's body structure
- The pedestrian is small
- The pedestrian has impaired mobility
- The sensor recognition is limited

- The radar sensor or camera is blocked with a foreign object or debris
- Inclement weather such as heavy rain or snow obscures the field of view of the radar sensor or camera
- The outside lighting is too bright (e.g. when driving in bright sunlight or in sun glare) or too dark (e.g. when driving on a dark rural road at night)
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road
- The field of view in front is obstructed by sun glare
- The windshield glass is fogged up; a clear view of the road is obstructed
- The adverse road conditions cause excessive vehicle vibrations while driving

# **A** WARNING

- Do not use the Autonomous Emergency Braking system when towing a vehicle. Application of the AEB system while towing may adversely affect the safety of your vehicle or the towing vehicle.
- Use extreme caution when the vehicle in front of you has cargo that extends rearward from the cab, or when the vehicle in front of you has higher ground clearance.
- The AEB system is designed to detect and monitor the vehicle ahead or detect a pedestrian in the roadway through radar signals and camera recognition. It is not designed to detect bicycles, motorcycles, or smaller wheeled objects such as luggage bags, shopping carts, or strollers.

(Continued)

## (Continued)

 Never try to test the operation of the AEB system. Doing so may cause severe injury or death.

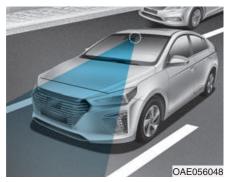
# Information

In some instances, the AEB system may be cancelled when subjected to electromagnetic interference.

### **A** WARNING

When you replace the windshield glass, bumper or radar/camera, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the system checked for calibration.

# LANE KEEPING ASSIST SYSTEM (LKAS) (IF EQUIPPED)



The Lane Keeping Assist System helps detect lane markers on the road with a camera at the front windshield, and assists the driver's steering to help keep the vehicle between lanes.

When the system detects the vehicle straying from its lane, it alerts the driver with a visual and audible warning, while applying a slight countersteering torque, trying to prevent the vehicle from moving out of its lane.

## **A** WARNING

The Lane Keeping Assist System is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always be aware of the surrounding and steer the vehicle.

### **A** WARNING

Take the following precautions when using the Lane Keeping Assist System (LKAS):

- Do not steer the steering wheel suddenly when the steering wheel is being assisted by the system.
- LKAS helps to prevent the driver from moving out of the lane unintentionally by assisting the driver's steering. However, the driver should not solely rely on the system but always pay attention on the steering wheel to stay in the lane.

(Continued)

## (Continued)

- The operation of the LKAS can be cancelled or not work properly according to road condition and surroundings. Always be cautious when driving.
- Do not disassemble the LKAS camera temporarily to tint the window or attach any types of coatings and accessories. If you disassemble the camera and assemble it again, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the system checked for calibration.
- When you replace the windshield glass, LKAS camera or related parts of the steering wheel, we recommend that you take your vehicle to an authorized HYUNDAI dealer and have the system checked for calibration.

(Continued)

#### (Continued)

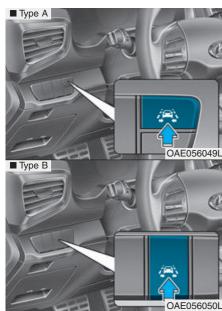
- The system detects lane markers and controls the steering wheel by a camera, therefore, if the lane markers are hard to detect, the system may not work properly.
  - Please refer to "Limitations of the system".
- Do not remove or damage the related parts of LKAS.
- You may not hear a warning sound of LKAS because of excessive audio sound.
- Do not place objects on the dashboard that reflects light such as mirrors, white paper, etc. The system may malfunction if the sunlight is reflected.

(Continued)

# (Continued)

- Always have your hands on the steering wheel while the LKAS system is activated. If you continue to drive with your hands off the steering wheel after the "Keep hands on steering wheel" warning message appears, the system will stop controlling the steering wheel.
- The steering wheel is not continuously controlled so if the vehicle speed is at a higher rate when leaving a lane the vehicle may not be controlled by the system. The driver must always follow the speed limit when using the system.
- If you attach objects to the steering wheel, the system may not assist steering or the hands off alarm may not work properly.
- When you tow a trailer, make sure that you turn off the LKAS system.

# **LKAS** operation



To activate/deactivate the LKAS:

With the ignition switch in the ON position, press the LKAS button located on the instrument panel on the left hand side of the steering wheel.

The indicator in the cluster display will initially illuminate white. This indicates the LKAS is in the READY but NOT ENABLED state.

# Information

If the indicator (white) is activated from the previous ignition cycle, the system will turn ON without any additional control. If you press the LKAS button again, the indicator on the cluster goes off.



The color of indicator will change depending on the condition of LKAS.

- White: Sensor does not detect lane markers or vehicle speed is under 60 km/h (40 mph).
- Green: Sensor detects lane markers and the system is able to control vehicle steering.

#### LKAS activation

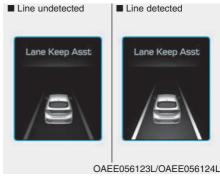


OAEE056122L

- To see the LKAS screen on the LCD display in the cluster, select SCC/LKAS mode (♠) for cluster type A or ASSIST mode (♠) for cluster type B. For more information, refer to "LCD Display Modes" in chapter 3.
- When both lane markers are detected and all the conditions to activate the LKAS are satisfied, a green steering wheel indicator will illuminate and the LKAS indicator light will change from white to green. This indicates that the LKAS system is in the ENABLED state and the steering wheel will be able to be controlled.

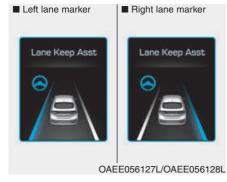
#### **A** WARNING

The Lane Keeping Assist System is a system to prevent the driver from leaving the lane. However, the driver should not solely rely on the system but always check the road conditions when driving.



- If vehicle speed is over 60 km/h (40 mph) and the system detects lane markers, the color changes from gray to white.
- If the system detects the left lane marker, the left lane marker color will change from gray to white.

- If the system detects the right lane marker, the right lane marker color will change from gray to white.
- Both lane markers must be detected for the system to fully activate.
- If your vehicle speed exceeds 60 km/h (40 mph) and the LKAS button is ON, the system is enabled. If your vehicle departs from the projected lane in front of you, the LKAS operates as follows:



A visual warning appears on the cluster LCD display. Either the left lane marker or the right lane marker in the cluster LCD display will blink depending on which direction the vehicle is veering.

If the steering wheel appears, the system will control the vehicle's steering to prevent the vehicle from crossing the lane marker.



# Keep hands on steering wheel

If the driver takes their hands off the steering wheel for several seconds while the LKAS is activated, the system will warn the driver.

# Information

If the steering wheel is held very lightly the message may still appear because the LKAS system may not recognize that the driver has their hands on the wheel.

## **A** WARNING

The warning message may appear late according to road conditions. Therefore, always have your hands on the steering wheel while driving.



OAEE056130L

Driver's grasp not detected. LKAS will be disabled momentarily

If the driver still does not have their hands on the steering wheel after the message "Keep hands on steering wheel", the system will not control the steering wheel and warn the driver only when the driver crosses the lane markers.

However, if the driver has their hands on the steering wheel again, the system will start controlling the steering wheel.

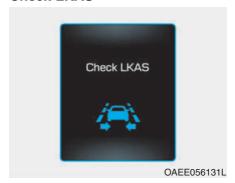
# **A** WARNING

- The driver is responsible for accurate steering.
- Turn off the system and drive the vehicle in below situations.
  - In bad weather
  - In bad road condition
  - When the steering wheel needs to be controlled by the driver frequently.

# **i** Information

- Even though the steering is assisted by the system, the driver can still steer to control the steering wheel.
- The steering wheel may feel heavier when the steering wheel is assisted by the system than when it is not.

# Warning light and message Check LKAS



If there is a problem with the system a message will appear for a few seconds. If the problem continues the LKAS failure indicator will illuminate.

### LKAS failure indicator



The LKAS failure indicator (yellow) will illuminate if the LKAS is not working properly. We recommend

that the system be checked by an authorized HYUNDAI dealer.

When there is a problem with the system do one of the following:

- Turn the system on after turning the vehicle off and on again.
- Check if the ignition switch is in the ON position.
- Check if the system is affected by the weather. (ex: fog, heavy rain, etc.)
- Check if there is foreign matter on the camera lens.

If the problem is not solved, we recommend that the system be checked by an authorized HYUNDAI dealer.

The LKAS system will not be in the ENABLED state and the steering wheel will not be assisted when:

- The turn signal is turned on before changing a lane. If you change lanes without the turn signal on, the steering wheel might be controlled.
- The vehicle is not driven in the middle of the lane when the system 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 60 km/h (37 mph) and over 180 km/h (112 mph).
- The vehicle makes sharp lane changes.
- The vehicle brakes suddenly.
- · Only one lane marker is detected.
- The lane is very wide or narrow.

- There are more than two lane markers on the road. (e.g. construction area)
- The vehicle is driven on a steep incline.
- The steering wheel is turned suddenly.

# **Limitations of the System**

The LKAS may operate prematurely even if the vehicle does not depart from the intended lane, OR, the LKAS may not assist your steering or warn you if the vehicle leaves the intended lane under the following circumstances:

# When the lane and road conditions are poor

- It is difficult to distinguish the lane marking from the road surface or the lane marking is faded or not clearly marked.
- It is difficult to distinguish the color of the lane marker from the road.
- There are markings on the road surface that look like a lane marker that is inadvertently being detected by the camera.
- The lane marker is merged or divided. (e.g. tollgate)
- The lane number increases or decreases or the lane marker are crossing complicatedly.
- There are more than two lane markers on the road in front of you.

- The lane marker is very thick or thin.
- The lanes ahead are not visible due to rain, snow, water on the road, damaged or stained road surface, or other factors.
- The shadow is on the lane marker by a median strip, trees, etc.
- The lanes are incomplete or the area is in a construction zone.
- There are crosswalk signs or other symbols on the road.
- The lane marker in a tunnel is stained with oil, etc.
- The lane suddenly disappears such as at the intersection.

# When external condition is intervened

- The brightness outside changes suddenly such as when entering or exiting a tunnel, or when passing under a bridge.
- The brightness outside is too low such as when the headlamps are not on at night or the vehicle is going through a tunnel.
- There is a boundary structure in the roadway such as a concrete barrier, guardrail and reflector post that is inadvertently being detected by the camera.
- When light coming from a street light or an oncoming vehicle is reflected on a wet road surface such as a puddle in the road.
- The field of view in front is obstructed by sun glare.
- There is not enough distance between you and the vehicle in front to be able to detect the lane marker or the vehicle ahead is driving on the lane marker.

- Driving on a steep grade, over a hill, or when driving on a curved road.
- The adverse road conditions cause excessive vehicle vibrations while driving.
- The surrounding of the inside rear view mirror temperature is high due to direct sunlight, etc.

#### When front visibility is poor

- The windshield or the LKAS camera lens is blocked with dirt or debris.
- The windshield glass is fogged up; a clear view of the road is obstructed.
- Placing objects on the dashboard, etc.
- The sensor cannot detect the lane because of fog, heavy rain or snow.

# **LKAS** function change

The driver can change LKAS to Lane Departure Warning System (LDWS) or change the LKAS mode between Standard LKA and Active LKA from the LCD display. Go to the 'User Settings → Driving Assist → Lane Keeping Assist System → Lane Departure/Standard LKA/ Active LKA'.

The system is automatically set to Standard LKA if a function is not selected.

#### Lane Departure

LDWS alerts the driver with a visual warning and a warning alarm when the system detects the vehicle departing the lane. The steering wheel will not be controlled.

#### Standard LKA

The Standard LKA mode guides the driver to help keep the vehicle within the lanes. It rarely controls the steering wheel, when the vehicle drives well inside the lanes. However, it starts to control the steering wheel, when the vehicle is about to deviate out of the lanes.

#### **Active LKA**

The Active LKA mode provides more frequent steering wheel control in comparison with the Standard LKA mode. Active LKA can reduce the driver's fatigue to assist the steering for maintaining the vehicle in the middle of the lane.

# SPEED LIMIT CONTROL SYSTEM (IF EQUIPPED)

# **Speed Limit Control operation**

You can set the speed limit when you do not want to drive over a specific speed.

If you drive over the preset speed limit, the warning system operates (set speed limit will blink and chime will sound) until the vehicle speed returns within the speed limit.

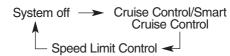
# Information

While speed limit control is in operation, the cruise control system cannot be activated.

# Speed limit control switch



: Changes mode between cruise control/smart cruise control system and speed limit control system.



RES+: Resumes or increases speed limit control speed.

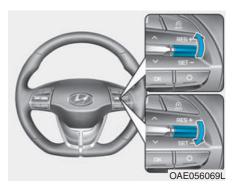
SET-: Sets or decreases speed limit control speed.

O: Cancels set speed limit.

### To set speed limit



 Press the MODE button to turn the system on. The speed limit indicator in the instrument cluster will illuminate.



- 2. Push the toggle switch down (SET-).
- 3. Push the toggle switch up (RES+) or down (SET-), and release it at the desired speed.
  - Push the toggle switch up (RES+) or down (SET-) and hold it. The speed will increase or decrease by 5 km/h.

The set speed limit will display on the instrument cluster.

If you would like to drive over the preset speed limit when you depress the accelerator pedal less than approximately 50%, the vehicle speed will maintain within speed limit.

However if you depress the accelerator pedal more than approximately 70%, you can drive over the speed limit. Then the set speed limit will blink and chime will sound until you return the vehicle speed within the speed limit.

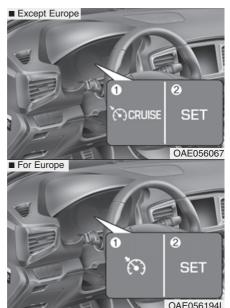
# To turn off the speed limit control, do one of the following:



- Press the MODE button.
- If you press O (cancel) button once, the set speed limit will cancel, but it will not turn the system off. If you wish to resume the speed limit, push the +RES or SET- toggle switch on your steering wheel to your desired speed.

## CRUISE CONTROL (IF EOUIPPED)

# **Cruise Control operation**



- 1. Cruise indicator
- 2. SET indicator

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

# **A** WARNING

Take the following precautions:

- Always set the vehicle speed under the speed limit in your country.
- If the Cruise Control is left on, (cruise indicator light in the instrument cluster is illuminated) the Cruise Control can be activated unintentionally. Keep the Cruise Control system off (cruise indicator light OFF) when the Cruise Control is not in use, to avoid inadvertently setting a speed.
- Use the Cruise Control system only when traveling on open highways in good weather.

(Continued)

# (Continued)

- Do not use the 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 drivin 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.

# Information

- During normal cruise control operation, when the SET switch is activated or reactivated after applying the brakes, the cruise control will energize after approximately 3 seconds. This delay is normal.
- Before activating the cruise control function, the system will check to verify that the brake switch is operating normally. Depress the brake pedal at least once after turning ON the ignition or starting the vehicle.



**Cruise control switch** 

CANCEL/O : Cancels cruise control operation.

CRUISE / (5): Turns cruise control system on or off.

RES+: Resumes or increases cruise control speed.

SET-: Sets or decreases cruise control speed.

# **i** Information



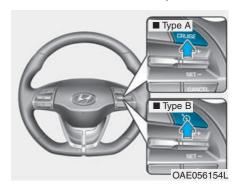
First, switch the mode to Cruise Control by pressing the NODE button if equipped with the Speed Limit Control System.

The mode changes, as below, whenever the so button is pressed.

System off — Cruise Control

Speed Limit Control

#### To set Cruise Control speed



- 1. Press the CRUISE / S button on the steering wheel to turn the system on. The cruise indicator will illuminate.
- Accelerate to the desired speed, which must be more than 30 km/h (20 mph).

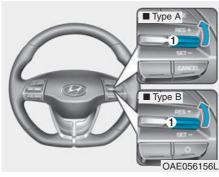


- 3. Push the toggle switch (1) down (SET-), and release it. The SET indicator light will illuminate.
- 4. Release the accelerator pedal.

# Information

On a steep slope, the vehicle may slightly slow down or speed up, while driving uphill or downhill.

# To increase Cruise Control speed

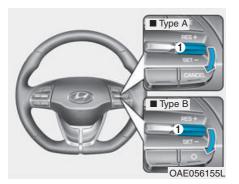


 Push the toggle switch (1) up (RES+) and hold it, while monitoring the SET speed on the instrument cluster.

Release the toggle switch when the desired speed is shown and the vehicle will accelerate to that speed.

 Push the toggle switch (1) up (RES+) and release it immediately.
 The cruising speed will increase 2.0 km/h (1.2 mph) each time the toggle switch is operated in this manner.  Depress the accelerator pedal. When the vehicle attains the desired speed, push the toggle switch (1) down (SET-).

# To decrease Cruise Control speed



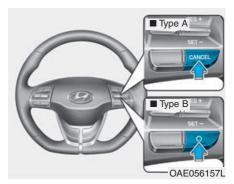
- Push the toggle switch (1) down (SET-) and hold it. Your vehicle will gradually slow down. Release the toggle switch at the speed you want to maintain.
- Push the toggle switch (1) down (SET-) and release it immediately. The cruising speed will decrease 2.0 km/h (1.2 mph) each time the toggle switch is operated in this manner.
- Lightly tap the brake pedal. When the vehicle attains the desired speed, push the toggle switch (1) down (SET-).

# To temporarily accelerate with the Cruise Control ON

Depress the accelerator pedal. When you take your foot off the accelerator, the vehicle will return to the previously set speed.

If you push the toggle switch down (SET-) at the increased speed, the Cruise Control will maintain the increased speed.

# Cruise Control will be cancelled when:



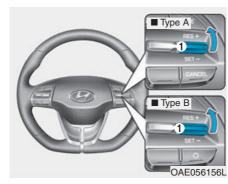
- Depressing the brake pedal.
- Pressing the CANCEL / O button located on the steering wheel.
- Pressing the CRUISE / S button. Both the indicator and the SET indicator will turn OFF.
- Moving the shift lever into N (Neutral).
- Decreasing the vehicle speed to less than the memory speed by approximately 20 km/h (12 mph).
- Decreasing the vehicle speed to less than approximately 30 km/h (20 mph).

- The ESC (Electronic Stability Control) is operating.
- Downshifting to 2nd gear when in Manual Shift mode.

# **i** Information

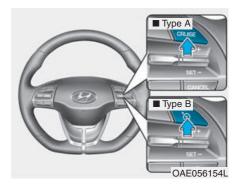
Each of the above actions will cancel Cruise Control operation (the SET indicator light in the instrument cluster will go off), but only pressing the CRUISE / (5) button will turn the system off. If you wish to resume Cruise Control operation, push the toggle switch up (RES+) located on your steering wheel. You will return to your previously preset speed, unless the system was turned off using the CRUISE / (5) button.

# To resume preset Cruising speed



Push the toggle switch (1) up (RES+). If the vehicle speed is over 30 km/h (20 mph), the vehicle will resume the preset speed.

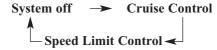
#### To turn Cruise Control off



- Press the CRUISE / 🔊 button (the cruise (🔊 cruise) indicator light will go off).
- Press the wood button (The (CRUISE) indicator light will go off.).
  - With the Cruise Control on, pressing the button once will turn Off the Cruise Control and turn on the Speed Limit Control.
  - With the Cruise Control off and Speed Limit Control on, pressing the button will turn off both system.

# i Information

The mode changes, as below, whenever the  $\bigcirc$  button is pressed.



## SMART CRUISE CONTROL SYSTEM (IF EQUIPPED)



OAE056097

- ① Cruise indicator
- ② Set speed
- 3 Vehicle-to-vehicle distance

To see the SCC screen on the LCD display in the cluster, select SCC/LKAS mode (A) for cluster type A or ASSIST mode (A) for cluster type B. For more information, refer to "LCD Display Modes" in chapter 3.

The Smart Cruise Control System allows you to program the vehicle to maintain constant speed and minimum distance between the vehicle ahead.

The Smart Cruise Control System will automatically adjust your vehicle speed to maintain your programmed speed and following distance without requiring you to depress the accelerator or brake pedals.

## **A** WARNING

For your safety, please read the owner's manual before using the Smart Cruise Control system.

#### A WARNING

The Smart Cruise Control System is not a substitute for safe driving practices, but a convenience function only. It is the responsibility of the driver to always check the speed and distance to the vehicle ahead.

# **A** WARNING

Take the following precautions:

 Always set the vehicle speed under the speed limit in your country.

(Continued)

### (Continued)

- If the Smart Cruise Control is left on, (cruise ( CRUISE) indicator light in the instrument cluster is illuminated) the Smart Cruise Control can be activated unintentionally. Keep the Smart Cruise Control System off (cruise ( CRUISE) indicator light OFF) when the Smart Cruise Control is not in use, to avoid inadvertently setting a speed.
- Use the Smart Cruise Control System only when traveling on open highways in good weather.
- Do not use the Smart Cruise Control when it may not be safe 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

(Continued)

## (Continued)

- When driving on a steep downhill or uphill
- When driving in windy areas
- When driving in parking lots
- When driving near crash barriers
- When driving on a sharp curve
- When driving with limited view (possibly due to bad weather, such as fog, snow, rain or sandstorm)
- When the vehicle sensing ability decreases due to vehicle modification resulting level difference of the vehicle's front and rear
- Do not use smart cruise control when towing a trailer.

#### Smart cruise control switch



CANCEL / O : Cancels cruise control operation.

CRUISE / (5): Turns cruise control system on or off.

RES+: Resumes or increases cruise control speed.

SET-: Sets or decreases cruise control speed.

: Sets vehicle-to-vehicle distance.



# *i* Information

First, switch the mode to Smart Cruise Control by pressing the MODE button if equipped with the Speed Limit Control System.

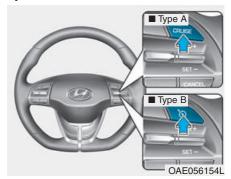
The mode changes, as below, whenever the button is pressed.

System off → Smart Cruise Control

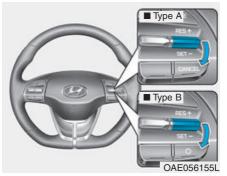
Speed Limit Control ←

## **Smart Cruise Control speed**

# To set Smart Cruise Control speed



- Push the button on the steering wheel to turn the system on.
   The cruise ( CRUISE) indicator will illuminate.
- Accelerate to the desired speed.The Smart Cruise Control speed can be set as follows:
  - 30 ~ 180 km/h (20 ~ 110 mph) : when there is no vehicle in front
  - 10 ~ 180 km/h (5 ~ 110 mph) : when there is a vehicle in front



- 3. Push the toggle switch down (SET-). The Set Speed and Vehicle-to-Vehicle Distance on the LCD display will illuminate.
- Release the accelerator pedal. The desired speed will automatically be maintained.

If there is a vehicle in front of you, the speed may decrease to maintain the distance to the vehicle ahead.

On a steep grade, the vehicle may slow down or speed up slightly while going uphill or downhill.

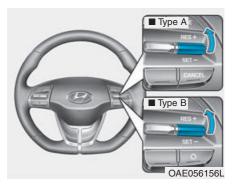
# *i* Information

Vehicle speed may decrease on an upward slope and increase on a downward slope.

# **A** CAUTION

When vehicle speed is under 10 km/h (6 mph), the Smart Cruise Control 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.

# To increase Smart Cruise Control set speed



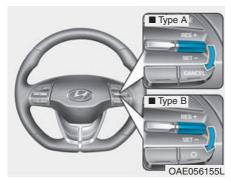
Follow either of these procedures:

- Push the toggle switch up (RES+), and release it immediately. The cruising speed will increase by 1 km/h (1 mph) each time you move the toggle switch up in this manner.
- Push the toggle switch up (RES+), and hold it. Your vehicle set speed will increase by 10 km/h (5 mph). Release the toggle switch at the speed you want.
- You can set the speed to 180 km/h (110 mph).

# **A** CAUTION

Check the driving condition before using the toggle switch. Driving speed sharply increases, when you push up and hold the toggle switch.

# To decrease the Smart Cruise Control set speed



Follow either of these procedures:

- Push the toggle switch down (SET-), and release it immediately. The cruising speed will decrease by 1 km/h (1 mph) each time you move the toggle switch down in this manner.
- Push the toggle switch down (SET-), and hold it. Your vehicle set speed will decrease by 10 km/h (5 mph). Release the toggle switch at the speed you want.
- You can set the speed to 30 km/h (20 mph).

# To temporarily accelerate with the Smart Cruise Control on

If you want to speed up temporarily when the Smart Cruise Control is on, depress the accelerator pedal. Increased speed will not interfere with Smart Cruise Control operation or change the set speed.

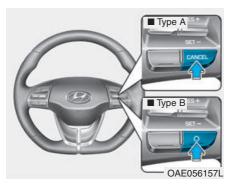
To return to the set speed, take your foot off the accelerator pedal.

If you push the toggle switch down (SET-) at increased speed, the cruising speed will be set again.

# Information

Be careful when accelerating temporarily, because the speed is not controlled automatically at this time even if there is a vehicle in front of you.

# Smart Cruise Control will be temporarily cancelled when:



#### Cancelled manually

- Depressing the brake pedal.
- Pressing the CANCEL/ O button located on the steering wheel.

The Smart Cruise Control turns off temporarily when the Set Speed and Vehicle-to-Vehicle Distance indicator on the LCD display turns off.

The cruise ( CRUISE) indicator is illuminated continuously.

# Cancelled automatically

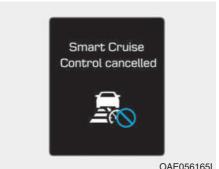
- The driver's door is opened.
- The shift lever is shifted to N (Neutral), R (Reverse) or P (Park).
- The parking brake is applied.
- The vehicle speed is under 10 km/h (5 mph).
- The vehicle speed is over 190 km/h (120 mph).
- The ESC (Electronic Stability Control), TCS (Traction Control System) or ABS is operating.
- The ESC is turned off.
- The sensor or the cover is dirty or blocked with foreign matter.
- The accelerator pedal is continuously depressed for a long period of time.
- The SCC system has malfunctioned.
- The engine performance is abnormal.
- · The AEB is activated.

Each of these actions will cancel the Smart Cruise Control operation. The Set Speed and Vehicle-to-Vehicle Distance on the LCD display will go off.

In a condition the Smart Cruise Control is cancelled automatically. the Smart Cruise Control will not resume even though the RES+ or SET- toggle switch is pushed.

# Information

If the Smart Cruise Control is cancelled by other than the reasons mentioned, we recommend that the system be checked by an authorized HYUNDAI dealer.



#### Smart Cruise Control cancelled

If the system is cancelled, the warning chime will sound and a message will appear for a few seconds.

You must adjust the vehicle speed by depressing the accelerator or brake pedal according to the road condition ahead and driving condition.

Always check the road conditions. Do not rely on the warning chime.

# To resume Smart Cruise Control set speed

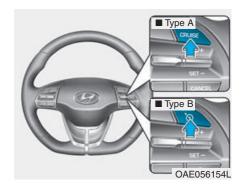
If any method other than the cruise toggle switch was used to cancel cruising speed and the system is still activated, the cruising speed will automatically resume when you push the toggle switch up (RES+) or down (SET-).

If you push the toggle switch up (RES+), the speed will resume to the recently set speed. However, if vehicle speed drops between 10 km/h to 30 km/h (5 mph to 20 mph), it will resume when there is a vehicle in front of your vehicle.

# Information

Always check the road conditions when you push the toggle switch up (RES+) to resume speed.

#### To turn Cruise Control off



- Press the CRUISE/ button (the cruise (CRUISE) indicator light will go off).
- Press the MODE button (The (C) CRUISE) indicator light will go off.). (if equipped with Speed Limit Control)
  - With the Smart Cruise Control on, pressing the button once will turn Off the Smart Cruise Control and turn on the Speed Limit Control.
  - With the Smart Cruise Control off and Speed Limit Control on, pressing the button will turn off both system.

# Information

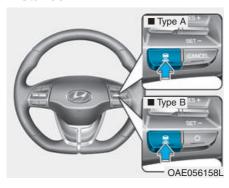
The mode changes, as below, whenever the  $\bigcirc$  button is pressed.

System off → Smart Cruise Control

Speed Limit Control ←

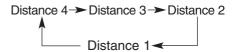
#### **Smart Cruise Control Vehicleto-Vehicle Distance**

# To set Vehicle-to-Vehicle Distance



When the Smart Cruise Control System is ON, you can set and maintain the distance from the vehicle ahead of you without pressing the accelerator or brake pedal.

Each time the button is pressed, the vehicle to vehicle distance changes as follows:



For example, if you drive at 90 km/h (56 mph), the distance is maintained as follows:

Distance 4 - approximately 52.5 m Distance 3 - approximately 40 m Distance 2 - approximately 32.5 m Distance 1 - approximately 25 m

# *i* Information

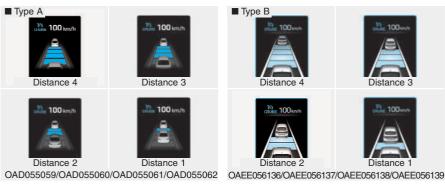
The distance is set to the last set distance when the system is used for the first time after starting the engine.

#### When the lane ahead is clear:



The vehicle speed will maintain the set speed.

#### When there is a vehicle ahead of you in your lane:



- Your vehicle speed will slow down or speed up to maintain the selected distance.
- If the vehicle ahead speeds up, your vehicle will travel at a steady cruising speed after accelerating to the set speed.

### **▲** WARNING



# When using the Smart Cruise Control System:

- The warning chime sounds and the Vehicle-to Vehicle Distance indicator blinks if the vehicle is unable to maintain the selected distance from the vehicle ahead.
- If the warning chime sounds, depress the brake pedal or use the steering wheel toggle switch to actively adjust the vehicle speed, and the distance to the vehicle ahead.

(Continued)

#### (Continued)

- Even if the warning chime is not activated, always pay attention to the driving conditions to prevent dangerous situations from occurring.
- Playing the vehicle audio system at high volume may offset the system warning sounds.

# **A** CAUTION



If the vehicle ahead (vehicle speed: less than 30km/h) disappears to the next lane, the warning chime will sound and a message "Watch for surrounding vehicles" will appear. Adjust your vehicle speed for vehicles or objects that can suddenly appear in front of you by depressing the brake pedal.

Always pay attention to the road condition ahead.

# Sensor to detect distance to the vehicle ahead



The Smart Cruise Control uses a sensor to detect distance to the vehicle ahead.

#### Warning message



#### Smart Cruise Control disabled. Radar blocked

When the sensor lens cover is blocked with dirt, snow, or debris, the Smart Cruise Control System operation may stop temporarily. If this occurs, a warning message will appear on the LCD display. Remove any dirt, snow, or debris and clean the radar sensor lens cover before operating the Smart Cruise Control System. The Smart Cruise Control system may not properly activate, if the radar is totally contaminated, or if any substance is not detected after the vehicle is in the ready ( ) mode (e.g. in an open terrain).

# *i* Information

For the SCC operation is temporarily stopped if the radar is blocked, but you wish to use cruise control mode (speed control function), you must convert to the cruise control mode (refer to "To convert to Cruise Control mode" in the following page.

# **A** 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.

(Continued)

### (Continued)

- 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 Cruise Control 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 Cruise Control System may not operate properly. We recommend you to have the vehicle inspected by an authorized HYUNDAI dealer.
- Use only genuine HYUNDAI parts to repair or replace a damaged sensor or sensor cover. Do not apply paint to the sensor cover.



Check Smart Cruise Control System
The message will appear when the vehicle to vehicle distance control system is not functioning normally.

We recommend that you take your vehicle to an authorized HYUNDAI dealer and have the system checked.

#### To adjust the sensitivity of Smart Cruise Control

The sensitivity of vehicle speed when following the front vehicle to maintain the set distance can be adjusted. Go to the 'User Settings  $\rightarrow$  Driving Assist  $\rightarrow$  Smart Cruise Control Speed  $\rightarrow$  Slow/Normal/Fast' on the LCD display. You may select one of the three stages you prefer.

- Slow:
- Vehicle speed following the front vehicle to maintain the set distance is slower than normal speed.
- Normal:
  - Vehicle speed following the front vehicle to maintain the set distance is normal.
- Fast:

Vehicle speed following the front vehicle to maintain the set distance is faster than normal speed.

# Information

The last selected speed sensitivity of the smart cruise control is remained in the system.

# To convert to Cruise Control mode

The driver may choose to only use the conventional Cruise Control mode (speed control function) by doing as follows:

- 1. Turn the Smart Cruise Control System on (the cruise indicator light will be on but the system will not be activated).
- Push and hold the Vehicle-to-Vehicle Distance button for more than 2 seconds.
- 3. Choose between "Smart Cruise Control" and "Cruise Control".

When the system is cancelled using the CRUISE/ button or the CRUISE/ button is used after the vehicle is in the ready ( ) mode, the Smart Cruise Control mode will turn on.

# **A** WARNING

When using the Cruise Control mode, you must manually adjust the distance to other vehicles by depressing the accelerator or brake pedal. The system does not automatically adjust the distance to vehicles in front of you.

## **Limitations of the system**

The Smart Cruise Control System may have limits to its ability to detect distance to the vehicle ahead due to road and traffic conditions.

#### On curves

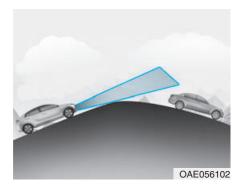


- The Smart Cruise Control System may not detect a moving vehicle in your lane, and then your vehicle could accelerate to the set speed. Also, the vehicle speed will decrease when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on curves and apply the brakes or accelerator pedal if necessary.



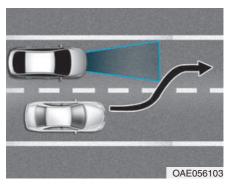
Your vehicle speed can be reduced due to a vehicle in the adjacent lane. Apply the accelerator pedal and select the appropriate set speed. Check to be sure that the road conditions permit safe operation of the Smart Cruise Control.

#### On inclines



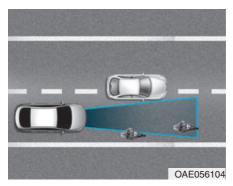
- During uphill or downhill driving, the Smart Cruise Control System may not detect a moving vehicle in your lane, and cause your vehicle to accelerate to the set speed. Also, the vehicle speed will rapidly decrease when the vehicle ahead is recognized suddenly.
- Select the appropriate set speed on inclines and apply the brake or accelerator pedal if necessary.

### Lane changing



- A vehicle which moves into your lane from an adjacent lane cannot be recognized by the sensor until it is in the sensor's detection range.
- The radar may not detect immediately when a vehicle cuts in suddenly. Always pay attention to the traffic, road and driving conditions.
- If a slower vehicle moves into your lane, your speed may decrease to maintain the distance to the vehicle ahead.
- If a faster vehicle which moves into your lane, your vehicle will accelerate to the set speed.

#### Vehicle recognition



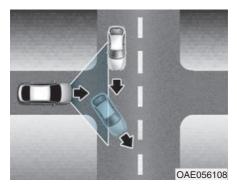
Some vehicles in your lane cannot be recognized by the sensor:

- Narrow vehicles such as motorcycles or bicycles
- Vehicles offset to one side
- Slow-moving vehicles or suddendecelerating vehicles
- Stopped vehicles
- Vehicles with small rear profile such as trailers with no loads

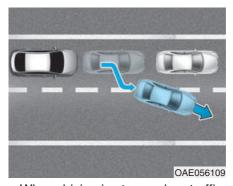
A vehicle ahead cannot be recognized correctly by the sensor if any of following occurs:

- 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

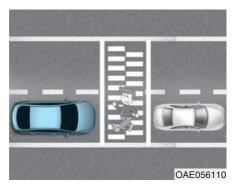
Apply the brake or accelerator pedal if necessary.



- Your vehicle may accelerate when a vehicle ahead of you disappears.
- When you are warned that the vehicle ahead of you is not detected, drive with caution.



 When driving in stop-and-go traffic, and a stopped vehicle in front of you merges out of the lane, the system may not immediately detect the new vehicle that is now in front of you. In this case, you must maintain a safe braking distance, and if necessary, depress the brake pedal to reduce your driving speed in order to maintain a safe distance.



 Always look out for pedestrians when your vehicle is maintaining a distance with the vehicle ahead.



 Always be cautious for vehicles with higher height or vehicles carrying loads that sticks out from the back of the vehicle.

### **⚠** WARNING

When using the Smart Cruise Control take the following precautions:

- If an emergency stop is necessary, you must apply the brakes. The vehicle cannot be stopped at every emergency situation by using the Smart Cruise Control System.
- 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 Cruise Control System cannot recognize a stopped vehicle, pedestrians or an oncoming vehicle. Always look ahead cautiously to prevent unexpected and sudden situations from occurring.

(Continued)

#### (Continued)

- Vehicles moving in front of you with a frequent lane change 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.
- Always be aware of the selected speed and vehicle to vehicle distance. The driver should not solely rely on the system but always pay attention to driving conditions and control your vehicle speed.
- The Smart Cruise Control System may not recognize complex driving situations so always pay attention to driving conditions and control your vehicle speed.

### NOTICE

The Smart Cruise Control System may not operate temporarily due to:

- Electrical interference
- Modifying the suspension
- Differences of tire abrasion or tire pressure
- Installing different type of tires

# SPECIAL DRIVING CONDITIONS

# **Hazardous driving conditions**

When hazardous driving elements are encountered such as water, snow, ice, mud and sand, take the bellow suggestions:

- Drive cautiously and keep a longer braking distance.
- Avoid abrupt braking or steering.
- When your vehicle is stuck in snow, mud, or sand, use second gear. Accelerate slowly to avoid unnecessary wheel spin.
- Put sand, rock salt, tire chains or other non-slip materials under the wheels to provide additional traction while the vehicle becomes stuck in ice, snow, or mud.

### **▲** WARNING

Downshifting with an automatic transmission while driving on slippery surfaces can cause an accident. The sudden change in tire speed could cause the tires to skid. Be careful when downshifting on slippery surfaces.

### **Rocking the vehicle**

If it is necessary to rock the vehicle to free it from snow, sand, or mud, first turn the steering wheel right and left to clear the area around your front wheels. Then, shift back and forth between R (Reverse) and a forward gear.

Try to avoid spinning the wheels, and do not race the engine.

To prevent transmission wear, wait until the wheels stop spinning before shifting gears. Release the accelerator pedal while shifting, and press lightly on the accelerator pedal while the transmission is in gear. Slowly spinning the wheels in forward and reverse directions causes a rocking motion that may free the vehicle.

### **▲** WARNING

If the vehicle is stuck and excessive wheel spin occurs, the temperature in the tires can increase very quickly. If the tires become damaged, a tire blow out or tire explosion can occur. This condition is dangerous -you and others may be injured. Do not attempt this procedure if people or objects are anywhere near the vehicle.

If you attempt to free the vehicle, the vehicle can overheat quickly, possibly causing an engine compartment fire or other damage. Try to avoid spinning the wheels as much as possible to prevent overheating of either the tires or the engine. DO NOT allow the vehicle to spin the wheels above 56 km/h (35 mph).

# Information

The ESC system (if equipped) must be turned OFF before rocking the vehicle.

#### NOTICE

If you are still stuck after rocking the vehicle a few times, have the vehicle pulled out by a tow vehicle to avoid engine overheating, possible damage to the transmission, and tire damage. See "Towing" in chapter 6.

### **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' headlamps.
- Keep your headlamps clean and properly aimed. Dirty or improperly aimed headlamps will make it much more difficult to see at night.
- Avoid staring directly at the headlamps of oncoming vehicles. You could be temporarily blinded, and it will take several seconds for your eyes to readjust to the darkness.

# **Driving in the rain**

Rain and wet roads can make driving dangerous. Here are a few things to consider when driving in the rain or on slick pavement:

- Slow down and allow extra following distance. A heavy rainfall makes it harder to see and increases the distance needed to stop your vehicle.
- Turn OFF your Cruise Control. (if equipped)
- Replace your windshield wiper blades when they show signs of streaking or missing areas on the windshield.
- Be sure your tires have enough tread. If your tires do not have enough tread, making a quick stop on wet pavement can cause a skid and possibly lead to an accident.
   See "Tire Tread" in chapter 7.
- Turn on your headlamps to make it easier for others to see you.
- Driving too fast through large puddles can affect your brakes. If you must go through puddles, try to drive through them slowly.

 If you believe your brakes may be wet, apply them lightly while driving until normal braking operation returns.

### Hydroplaning

If the road is wet enough and you are going fast enough, your vehicle may have little or no contact with the road surface and actually ride on the water. The best advice is SLOW DOWN when the road is wet.

The risk of hydroplaning increases as the depth of tire tread decreases, refer to "Tire Tread" in chapter 7.

# **Driving in flooded areas**

Avoid driving through flooded areas unless you are sure the water is no higher than the bottom of the wheel hub. Drive through any water slowly. Allow adequate stopping distance because brake performance may be reduced.

After driving through water, dry the brakes by gently applying them several times while the vehicle is moving slowly.

## **Highway driving**

#### **Tires**

Adjust the tire inflation, as specified. Under-inflation may overheat or damage the tires.

Do not install worn-out or damaged tires, which may reduce traction or fail the braking operation.

# Information

Never over-inflate your tires above the maximum inflation pressure, as specified on your tires.

# Fuel, engine coolant and engine oil

Driving at higher speeds on the highway consumes more fuel and is less efficient than driving at a slower, more moderate speed. Maintain a moderate speed in order to conserve fuel when driving on the highway.

Be sure to check both the engine coolant level and the engine oil before driving.

#### Drive belt

A loose or damaged drive belt may overheat the engine.

#### 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 engine braking to the fullest extent. Sudden brake applications on snowy or icy roads may cause the vehicle to skid.

To drive your vehicle in deep snow, it may be necessary to use snow tires or to install tire chains on your tires.

Always carry emergency equipment. Some of the items you may want to carry include tire chains, tow straps or chains, a flashlight, emergency flares, sand, a shovel, jumper cables, a window scraper, gloves, ground cloth, coveralls, a blanket, etc.

#### Snow tires

## **A** WARNING

Snow tires should be equivalent in size and type to the vehicle's standard tires. Otherwise, the safety and handling of your vehicle may be adversely affected.

If you mount snow tires on your vehicle, make sure to use radial tires of the same size and load range as the original tires. Mount snow tires on all four wheels to balance your vehicle's handling in all weather conditions. The traction provided by snow tires on dry roads may not be as high as your vehicle's original equipment tires. Check with the tire dealer for maximum speed recommendations.

# *i* Information

Do not install studded tires without first checking local and municipal regulations for possible restrictions against their use.

#### 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. If tire chains must be used, use genuine HYUNDAI parts and install the tire chain after reviewing the instructions provided with the tire chains. Damage to your vehicle caused by improper tire chain use is not covered by your vehicle manufacturer's warranty.

#### **A** WARNING

The use of tire chains may adversely affect vehicle handling:

- Drive less than 30 km/h (20 mph) or the chain manufacturer's recommended speed limit, whichever is lower.
- Drive carefully and avoid bumps, holes, sharp turns, and other road hazards, which may cause the vehicle to bounce.
- Avoid sharp turns or locked wheel braking.

# *i* Information

- Install tire chains only in pairs and on the front tires. It should be noted that installing tire chains on the tires will provide a greater driving force, but will not prevent side skids.
- Do not install studded tires without first checking local 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 30 km/h (20 mph)) 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 engine 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 0.5~1.0 km (0.3~0.6 miles).
- Do not use tire chains on vehicles equipped with aluminum wheels. If unavoidable, use a wire type chain.
- Use wire chains less than 12 mm (0.47 in) thick to prevent damage to the chain's connection.

#### **Winter Precautions**

# Use high quality ethylene glycol coolant

Your vehicle is delivered with high quality ethylene glycol coolant in the cooling system. It is the only type of coolant that should be used because it helps prevent corrosion in the cooling system, lubricates the water pump and prevents freezing. Be sure to replace or replenish your coolant in accordance with the maintenance schedule in chapter 7. Before winter, have your coolant tested to assure that its freezing point is sufficient for the temperatures anticipated during the winter.

#### **Check battery and cables**

Winter temperatures affect battery performance. Inspect the battery and cables, as specified in the chapter 7. The battery charging level can be 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 8. When you are not sure about a type of winter weight oil, consult an authorized HYUNDAI dealer.

# Check spark plugs and ignition system

Inspect the spark plugs, as specified in the chapter 7. If necessary, replace them. Also check all ignition wirings and components for any cracks, wear-out, and damage.

#### 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 anti-freeze 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 engine 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 engine compartment

Putting objects or materials in the engine compartment may cause an engine failure or combustion, because they may block the engine cooling. Such damage will not be covered by the manufacturer's warranty.

### TRAILER TOWING (FOR EUROPE)

If you are considering to tow with your vehicle, you should first your country's legal requirements. As laws vary the requirements for towing trailers, cars, or other types of vehicles or apparatus may differ. Ask an authorized HYUNDAI dealer for further details before towing.

Remember that trailering is different than just driving your vehicle by itself. Trailering means changes in handling, durability, and fuel economy. Successful, safe trailering requires correct equipment, and it has to be used properly. Damage to your vehicle caused by improper trailer towing is not covered by your vehicle manufacturer's warranty.

This section contains many timetested, important trailering tips and safety rules. Many of these are important for your safety and that of your passengers. Please read this section carefully before you pull a trailer.

#### **A** WARNING

Take the following precautions:

- If you don't use the correct equipment and/or drive improperly, you can lose control of the vehicle when you are pulling a trailer. For example, if the trailer is too heavy, the braking performance may be reduced. You and your passengers could be seriously or fatally injured. Pull a trailer only if you have followed all the steps in this section.
- Before towing, make sure the total trailer weight, GCW (Gross Combination Weight), GVW (Gross Vehicle Weight), GAW (Gross Axle Weight) and trailer tongue load are all within the limits.

# information - For Europe

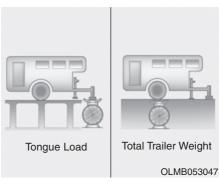
- The technically permissible maximum load on the rear axle(s) may be exceeded by not more than 15 % and the technically permissible maximum laden mass of the vehicle may be exceeded by not more than 10% or 100 kg (220.4 lbs), whichever value is lower. In this case, do not exceed 100 km/h (62.1 mph) for vehicle of category M1 or 80 km/h (49.7 mph) for vehicle of category N1.
- When a vehicle of category M1 is towing a trailer, the additional load imposed at the trailer coupling device may cause the tire maximum load ratings to be exceeded, but not by more than 15%. In this case, do not exceed 100 km/h (62.1 mph) and increase the tire inflation pressure by at least 0.2 bar.

## If you decide to pull a trailer?

Here are some important points if you decide to pull a trailer:

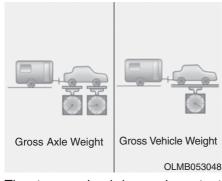
- Consider using a sway control. You can ask a trailer hitch dealer about sway control.
- Do not do any towing with your vehicle during its first 2,000 km (1,200 miles) in order to allow the engine to properly break in. Failure to heed this caution may result in serious engine or transmission damage.
- When towing a trailer, be sure to consult an authorized HYUNDAI dealer for further information on additional requirements such as a towing kit, etc.
- Always drive your vehicle at a moderate speed (less than 100 km/h (60 mph)) or posted towing speed limit.
- On a long uphill grade, do not exceed 70 km/h (45 mph) or the posted towing speed limit, whichever is lower.
- Carefully observe the weight and load limits provided in the following pages.

## Trailer weight



What is the maximum safe weight of a trailer? It should never weigh more than the maximum trailer weight with trailer brakes. But even that can be too heavy. It depends on how you plan to use your trailer. For example, speed, altitude, road grades, outside temperature and how often your vehicle is used to pull a trailer are all important. The ideal trailer weight can also depend on any special equipment that you have on your vehicle.

# Tongue load



The tongue load is an important weight to measure because it affects the total Gross Vehicle Weight (GVW) of your vehicle. The trailer tongue should weigh a maximum of 10% of the total loaded trailer weight, within the limits of the maximum trailer tongue load permissible.

After you've loaded your trailer, weigh the trailer and then the tongue, separately, to see if the weights are proper. If they aren't, you may be able to correct them simply by moving some items around in the trailer.

#### **A** WARNING

#### Take the following precautions:

- Never load a trailer with more weight in the rear than in the front. The front should be loaded with approximately 60% of the total trailer load; the rear should be loaded with approximately 40% of the total trailer load.
- Never exceed the maximum weight limits of the trailer or trailer towing equipment.
   Improper loading can result in damage to your vehicle and/or personal injury. Check weights and loading at a commercial scale or highway patrol office equipped with scales.

# Information

With increasing altitude the engine performance decreases. From 1,000 m above sea level and for every 1,000 m thereafter 10% of vehicle/trailer weight (trailer weighter + gross vehicle weight) must be deducted.

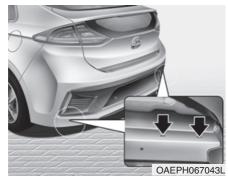
#### Reference weight and distance when towing a trailer (for Europe)

| Item  |                      | Kappa 1.6 GDI |  |
|---|----------------------|---------------|--|
|   |                      | DCT           |  |
| Maximum trailer weight  | With brake system    | 750 (1653)    |  |
| kg (lbs.)   | Without brake system | 600 (1322)    |  |
| Maximum permissible static vertical load on the coupling device |                      | 40 (88)       |  |
|   | kg (lbs.)            | 40 (88)       |  |
| Recommended distance from rear wheel center to coupling point   |                      | 990 (39)      |  |
|   | mm (inch)            | 330 (33)      |  |

DCT: Dual clutch transmission

## **Trailer towing equipment**

#### Hitches



# **i** Information

The mounting hole for hitches are located on both sides of the underbody behind the rear tires.

It's important to have the correct hitch equipment. Crosswinds, large trucks going by, and rough roads are a few reasons why you'll need the right hitch. Here are some rules to follow:

- Do you have to make any holes in the body of your vehicle when you install a trailer hitch? If you do, then be sure to seal the holes later when you remove the hitch. If you don't seal them, carbon monoxide (CO) from your exhaust can get into your vehicle, as well as dirt and water.
- The bumpers on your vehicle are not intended for hitches. Do not attach rental hitches or other bumper-type hitches to them. Use only a frame-mounted hitch that does not attach to the bumper.
- A HYUNDAI trailer hitch accessory is available at an authorized HYUNDAI dealer.

#### Safety chains

You should always attach chains between your vehicle and your trailer. Instructions about safety chains may be provided by the hitch manufacturer or trailer manufacturer. Follow the manufacturer's recommendation for attaching safety chains. Always leave just enough slack so you can turn with your trailer. And, never allow safety chains to drag on the ground.

#### Trailer brakes

If your trailer is equipped with a braking system, make sure it conforms to your country's regulations and that it is properly installed and operating correctly.

If your trailer weighs more than the maximum trailer weight without trailer brakes loaded, then it needs its own brakes and they must be adequate. Be sure to read and follow the instructions for the trailer brakes so you'll be able to install, adjust and maintain them properly. Be sure not to modify your vehicle's brake system.

### **A** WARNING

Do not use a trailer with its own brakes unless you are absolutely certain that you have properly set up the brake system. This is not a task for amateurs. Use an experienced, competent trailer shop for this work.

# **Driving with a trailer**

Towing a trailer requires a certain amount of experience. Before setting out for the open road, you must get to know your trailer. Acquaint yourself with the feel of handling and braking with the added weight of the trailer. And always keep in mind that the vehicle you are driving is now longer and not nearly as responsive as your vehicle is by itself.

Before you start, check the trailer hitch and platform, safety chains, electrical connector(s), lights, tires and brakes.

During your trip, occasionally check to be sure that the load is secure, and that the lights and trailer brakes are still working.

#### Distance

Stay at least twice as far behind the vehicle ahead as you would when driving your vehicle without a trailer. This can help you avoid situations that require heavy braking and sudden turns.

#### Passing

You will need more passing distance up ahead when you're towing a trailer. And, because of the increased vehicle length, you'll need to go much farther beyond the passed vehicle before you can return to your lane.

#### Backing up

Hold the bottom of the steering wheel with one hand. Then, to move the trailer to the left, move your hand to the left. To move the trailer to the right, move your hand to the right. Always back up slowly and, if possible, have someone guide you.

### Making turns

When you're turning with a trailer, make wider turns than normal. Do this so your trailer won't strike soft shoulders, curbs, road signs, trees, or other objects. Avoid jerky or sudden maneuvers. Signal well in advance.

# Turn signals

When you tow a trailer, your vehicle has to have a different turn signal flasher and extra wiring. The green arrows on your instrument panel will flash whenever you signal a turn or lane change. Properly connected, the trailer lights will also flash to alert other drivers you're about to turn, change lanes, or stop.

When towing a trailer, the green arrows on your instrument panel will flash for turns even if the bulbs on the trailer are burned out. Thus, you may think drivers behind you are seeing your signals when, in fact, they are not. It's important to check occasionally to be sure the trailer bulbs are still working. You must also check the lights every time you disconnect and then reconnect the wires.

#### **A** WARNING

Do not connect a trailer lighting system directly to your vehicle's lighting system. Use an approved trailer wiring harness. Failure to do so could result in damage to the vehicle electrical system and/or personal injury. Consult an authorized HYUNDAI dealer for assistance.

## Driving on hills

Reduce speed and shift to a lower gear before you start down a long or steep downgrade. If you don't shift down, you might have to use your brakes so much that they would get overheated and may not operate efficiently.

On a long uphill grade, shift down and reduce your speed to around 70 km/h (45 mph) to reduce the possibility of engine and transmission overheating.

If your trailer weighs more than the maximum trailer weight without trailer brakes and you have an automatic transmission/dual clutch transmission, you should drive in D (Drive) when towing a trailer.

Operating your vehicle in D (Drive) when towing a trailer will minimize heat build-up and extend the life of your transmission.

#### NOTICE

To prevent engine and/or transmission overheating:

- When towing a trailer on steep grades (in excess of 6%) pay close attention to the engine coolant temperature gauge to ensure the engine does not overheat. If the needle of the coolant temperature gauge moves towards "H" (HOT), pull over and stop as soon as it is safe to do so, and allow the engine to idle until it cools down. You may proceed once the engine has cooled sufficiently.
- If you tow a trailer with the maximum gross vehicle weight and maximum trailer weight, it can cause the engine or transmission to overheat. When driving in such conditions, allow the engine to idle until it cools down. You may proceed once the engine or transmission has cooled sufficiently.

(Continued)

#### (Continued)

- When towing a trailer, your vehicle speed may be much slower than the general flow of traffic, especially when climbing an uphill grade. Use the right hand lane when towing a trailer on an uphill grade. Choose your vehicle speed according to the maximum posted speed limit for vehicles with trailers, the steepness of the grade, and your trailer weight.
- Vehicles equipped with a dual clutch transmission when towing a trailer on steep grades, need to be aware that the clutch in the transmission could overheat.

When the clutch is overheated, the safe protection mode engages. If the safe protection mode engages, the gear position indicator on the cluster blinks with a chime sound.

(Continued)

#### (Continued)

At this time, a warning message will appear on the LCD display and driving may not be smooth. If you ignore this warning, the driving condition may become worse.

To return to normal driving conditions, stop the vehicle on a flat road and apply the foot brake for a few minutes before driving off.

#### Parking on hills

Generally, if you have a trailer attached to your vehicle, you should not park your vehicle on a hill.

However, if you ever have to park your trailer on a hill, here's how to do it:

- 1. Pull the vehicle into the parking space.
  - Turn the steering wheel in the direction of the curb (right if headed down hill, left if headed up hill).
- 2. Shift the vehicle to P (Park).
- 3. Set the parking brake and shut off the vehicle.
- Place wheel chocks under the trailer wheels on the down hill side of the wheels.
- Start the vehicle, hold the brakes, shift to neutral, release the parking brake and slowly release the brakes until the trailer chocks absorb the load.

- 6. Reapply the brakes and parking brakes.
- Move the shift lever to P (Park) when the vehicle is parked on a uphill grade and in R (Reverse) on a downhill.
- 8. Shut off the vehicle and release the vehicle brakes but leave the parking brake set.

#### A WARNING

To prevent serious or fatal injury:

- Do not get out of the vehicle without the parking brake firmly set. If you have left the engine running, the vehicle can move suddenly. You and others could be seriously or fatally injured.
- Do not apply the accelerator pedal to hold the vehicle on an uphill.

# Ready to leave after parking on a hill

- 1. With the shift lever in P (Park), apply your brakes and hold the brake pedal down while you:
  - Start your engine;
  - Shift into gear; and
  - Release the parking brake.
- 2. Slowly remove your foot from the brake pedal.
- 3. Drive slowly until the trailer is clear of the chocks.
- 4. Stop and have someone pick up and store the chocks.

# Maintenance when towing a trailer

Your vehicle will need service more often when you regularly pull a trailer. Important items to pay particular attention to include engine oil, automatic transmission fluid, axle lubricant and cooling system fluid. Brake condition is another important item to frequently check. If you're trailering, it's a good idea to review these items before you start your trip. Don't forget to also maintain your trailer and hitch. Follow the maintenance schedule that accompanied your trailer and check it periodically. Preferably, conduct the check at the start of each day's driving. Most importantly, all hitch nuts and bolts should be tight.

#### NOTICE

To prevent vehicle damage:

- Due to higher load during trailer usage, overheating might occur on hot days or during uphill driving. If the coolant gauge indicates over-heating, switch off the air conditioner and stop the vehicle in a safe area to cool down the engine.
- Do not switch off the engine while the coolant gauge indicates over-heating.
  - (Keep the engine idle to cool down the engine)
- When towing check automatic transmission fluid more frequently.
- If your vehicle is not equipped with an air conditioner, you should install a condenser fan to improve engine performance when towing a trailer.

#### **VEHICLE WEIGHT**

Two labels on your driver's door sill show how much weight your vehicle was designed to carry: the Tire and Loading Information Label and the Certification Label.

Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, from the vehicle's specifications and the Certification Label:

#### **Base Curb Weight**

This is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

### **Vehicle Curb Weight**

This is the weight of your new vehicle when you picked it up from your dealer plus any aftermarket equipment.

#### **Cargo Weight**

This figure includes all weight added to the Base Curb Weight, including cargo and optional equipment.

#### **GAW (Gross Axle Weight)**

This is the total weight placed on each axle (front and rear) - including vehicle curb weight and all payload.

#### **GAWR (Gross Axle Weight Rating)**

This is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the Certification Label. The total load on each axle must never exceed its GAWR.

## **GVW (Gross Vehicle Weight)**

This is the Base Curb Weight plus actual Cargo Weight plus passengers.

# **GVWR (Gross Vehicle Weight Rating)**

This is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). The GVWR is shown on the Certification Label located on the driver's door sill.

## **Overloading**

#### **▲** WARNING

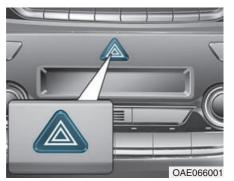
The Gross Axle Weight Rating (GAWR) and the Gross Vehicle Weight Rating (GVWR) for your vehicle are on the Certification Label attached to the driver's (or front passenger's) door. Exceeding these ratings can cause an accident or vehicle damage. You can calculate the weight of your load by weighing the items (and people) before putting them in the vehicle. Be careful not to overload your vehicle.

# What to do in an emergency

| Hazard warning flasher                          | 6-2   |
|---|-------|
| In case of an emergency while driving           | 6-2   |
| If the engine stalls while driving              | 6-2   |
| If the engine stalls at a crossroad or crossing | 6-2   |
| If you have a flat tire while driving           |       |
| If the engine will not start                    |       |
| If the 12 volt battery is discharged            |       |
| (hybrid vehicle)                                | 6-5   |
| Before jump starting                            |       |
| Jump starting                                   |       |
| If the 12 volt battery is discharged            |       |
| (plug-in hybrid vehicle)                        | 6-9   |
| Jump strating                                   |       |
| If the engine overheats                         |       |
| Tire Pressure Monitoring System (TPMS)          | .6-14 |
| Check tire pressure                             |       |
| Tire pressure monitoring system                 | 6-15  |
| Low tire pressure telltale                      | 6-15  |
| Low tire pressure position and                  |       |
| tire pressure telltale                          | 6-15  |
| TPMS (Tire Pressure Monitoring System)          |       |
| malfunction indicator                           | 6-17  |
| Changing a tire with TPMS                       | 6-18  |

| If you have a flat tire (with spare tire)        |       |
|--|-------|
| Changing tires                                   | 6-21  |
| Jack label                                       | 6-26  |
| EC Declaration of conformity for Jack            | 6-27  |
| If you have a flat tire (with tire mobility kit) | .6-28 |
| Type A   | 6-28  |
| Type B   |       |
| Towing   | .6-43 |
| Towing service                                   |       |
| Removable towing hook                            | 6-44  |
| Emergency towing                                 | 6-45  |
| Emergency commodity                              | .6-47 |
| Fire extinguisher                                |       |
| First aid kit                                    | 6-47  |
| Triangle reflector                               | 6-47  |
| Tire pressure gauge                              |       |

#### 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 ignition switch 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 engine 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 engine again. If your vehicle will not start, we recommend that you contact an authorized HYUNDAI dealer.

### If the engine stalls at a crossroad or crossing

If the engine 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, move the shift lever into P (Park), apply the parking brake, and place the ignition switch in the LOCK/ 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 ENGINE WILL NOT START

#### Hybrid vehicle

- Be sure the shift lever is in P (Park). The vehicle starts only when the shift lever is in P (Park).
- This vehicle does not have a regular 12V battery that needs periodic replacement. It is lithium ion polymer type integrated into the HEV high voltage battery. The vehicle has a 12V battery protection system that cuts 12V battery from vehicle draw to prevent full discharge. If vehicle will not start, first try pressing the 12V Battery Reset switch (left side of the steering wheel near the fuel door open switch) to reconnect the 12V battery, but you must start vehicle within 15 seconds of pressing the 12V Battery Reset switch. After starting vehicle, operate the vehicle safely outdoors in ready mode stopped and/or drive it for 30 minutes total to charge the 12V battery fully.

# **A** CAUTION

Push or pull starting the vehicle may cause the catalytic converter to overload which can lead to damage to the emission control system.

 Check the fuel level and add fuel if necessary.

If the vehicle still does not start, we recommend that you call an authorized HYUNDAI dealer for assistance.

#### Plug-in hybrid vehicle

- Be sure the shift lever is in P (Park). The vehicle starts only when the shift lever is in P (Park).
- Check the 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 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.

## **A** CAUTION

Push or pull starting the vehicle may cause the catalytic converter to overload which can lead to damage to the emission control system.

 Check the fuel level and add fuel if necessary.

If the vehicle still does not start, we recommend that you call an authorized HYUNDAI dealer for assistance.

### IF THE 12 VOLT BATTERY IS DISCHARGED (HYBRID VEHICLE)

## **Before jump starting**

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

# Using the 12V battery reset switch



- Press the 12V Battery Reset switch to reconnect the 12V battery.
- Start the vehicle within 15 seconds of pressing the 12V Battery Reset switch.
- 3. After starting vehicle ( indicator on), operate the vehicle safely outdoors in ready mode stopped and/or drive it for 30 minutes total to charge the 12V battery fully.

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

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

# **i** Information

After starting the vehicle ( indicator on), the 12V battery is being charged whether the engine is running or not. Although there is no enginesound, it is unnecessary to depress the accelerator pedal.

The following items may need to be reset after the battery has been discharged or the battery has been disconnected.

See chapter 3 or 4 for:

- Power Windows
- Trip Computer
- Climate Control System
- Clock
- Audio System
- Sunroof
- Driver Position Memory System

#### NOTICE

External power source using 12V battery

The use of external power accessories may reduce performance and function of the vehicle. Especially, the use of dash cameras may shut off the power of the vehicle prior to the dash camera's automatic shut-down.

If the power of the vehicle is shut off, start the vehicle as explained. (refer to "Using the 12V Battery Reset Switch")

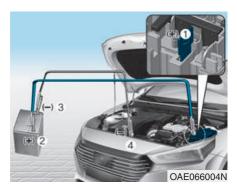
### **Jump starting**

In the event vehicle still does not have a functional 12V battery (check if interior lights will not turn on) then you can try a jump start to the engine compartment jumper terminals using a 12V booster pack or jumper cables from another vehicle's 12V battery according to the following instructions.

# **A** CAUTION

Jump starting can be dangerous if done incorrectly. Follow the jump starting procedure in this section to avoid serious injury or damage to your vehicle. If in doubt about how to properly jump start your vehicle, we strongly recommend that you have a service technician or towing service do it for you.

- 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 engine 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 brake. Turn both vehicles OFF.



- 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).
- 6. Connect the second jumper cable to the black, negative (-) battery/ chassis ground of the assisting vehicle (3).

7. Connect the other end of the second jumper cable to the black, negative (-) chassis ground of your vehicle (4).

Do not allow the jumper cables to contact anything except the correct battery or jumper terminals or the correct ground. Do not lean over the battery when making connections.



- 8. Press the 12V Battery Reset switch.
- Start the engine of the assisting vehicle and let it run for a few minutes.
- 10. Start your vehicle as soon as possible. After starting vehicle ( indicator on), operate the vehicle safely outdoors in ready mode stopped and/or drive it for 30 minutes total to charge the 12V battery fully.

If your vehicle will not start after a few attempts, it probably requires servicing. In this event please seek qualified assistance. If the cause of your battery discharging is not apparent, we recommend that you have your vehicle checked by an authorized HYUNDAI dealer.

Disconnect the jumper cables in the exact reverse order you connected them:

- 1. Disconnect the jumper cable from the black, negative (-) chassis ground of your vehicle (4).
- 2. Disconnect the other end of the jumper cable from the black, negative (-) battery/chassis ground of the assisting vehicle (3).
- 3. Disconnect the second jumper cable from the red, positive (+) battery/jumper terminal of the assisting vehicle (2).
- Disconnect the other end of the jumper cable from the red, positive
   jumper terminal of your vehicle
   (1).

# *i* Information

The voltage range of the charger should be 13.3~14V and its current range should be less than 60A. (13.8V is recommended).

# **A** CAUTION

- The use of an improper charger with a voltage and current range higher than specified may cause overheating and damage to the 12V battery.
- The use of an incorrect charger will lead to a power shut-off to save the 12V battery. Stop using the incorrect charger once the power of the vehicle is shut off.

# *i* Information



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

#### NOTICE

To prevent damage to your vehicle:

- Only use a 12-volt power supply (battery or jumper system) to jump start your vehicle.
- Do not attempt to jump start your vehicle by push-starting.

#### IF THE 12 VOLT BATTERY IS DISCHARGED (PLUG-IN HYBRID VEHICLE)

#### **Jump strating**

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.

#### **A** 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.

(Continued)

#### (Continued)



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.

(Continued)

#### (Continued)

- 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 engine running or when the Engine 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.

#### Information



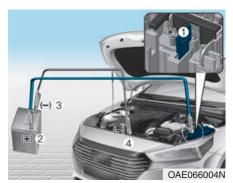
An inappropriately disposed battery can be harmful to the environment and human health. Dispose the battery according to your local law(s) or regulations.

#### 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 engine compartment at all times, even when the vehicles are turned off.
- 3. Turn off all electrical devices such as radios, lights, air conditioning, etc. Put the vehicles in P (Park) and set the parking brake. Turn both vehicles OFF.

#### *i* Information

Your vehicle has a battery in the luggage compartment, but when you jump start your vehicle, use the jumper terminal in the engine compartment.



- 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).
- 6. 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 (-) chassis ground of your vehicle (4).
  - Do not allow the jumper cables to contact anything except the correct battery or jumper terminals or the correct ground. Do not lean over the battery when making connections.
- Start the engine 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:

- 1. Disconnect the jumper cable from the black, negative (-) chassis ground of your vehicle (4).
- 2. Disconnect the other end of the jumper cable from the black, negative (-) battery/chassis ground of the assisting vehicle (3).
- 3. Disconnect the second jumper cable from the red, positive (+) battery/jumper terminal of the assisting vehicle (2).
- Disconnect the other end of the jumper cable from the red, positive (+) jumper terminal of your vehicle (1).

#### IF THE ENGINE OVERHEATS



If your temperature gauge indicates overheating, you experience a loss of power, or hear loud pinging or knocking, the engine may be overheating. If this happens, you should:

- 1. Pull off the road and stop as soon as it is safe to do so.
- 2. Place the shift lever in P (Park) and set the parking brake

- 3. Make sure that there is no hot steam gushing out of the engine compartment. When it is safe to do so, open the engine compartment, and check the water-pump connector. When the water-pump connector is disconnected, stop the engine, re-connect the water-pump connector, and then re-start the engine.
- 4. Set the temperature and the air flow to the maximum, and turn ON the air conditioner.

#### **▲** WARNING



While the engine is running, keep hands, clothing and tools away from the moving parts such as the cooling fan and drive belt to prevent serious injury.

- 5. When the Service warning light ( ) illuminates on the instrument cluster, immediately stop the engine, and contact an authorized HYUNDAI dealer. When the engine warning light ( ) illuminates, or when the coolant or hot steams gush out of the engine compartment, leave the engine compartment opened, while running the engine. This is to ventilate the engine compartment and to cool down the engine.
- 6. Check the coolant temperature gauge on the instrument cluster to make sure the coolant temperature is sufficiently cooled down. Check the coolant level. When it is insufficient, check its connection with the radiator, the heater hose, and the water pump for any leakage. When there is no leakage, add the coolant. However, if the problems persists, such as the illumination of the warning lights, leakages, or the cooling-fan malfunction, which may overheat the engine, immediately stop the engine, and have your vehicle checked by an authorized HYUNDAI dealer

#### **A** WARNING



Never remove the engine coolant cap and/or inverter coolant cap or the drain plug while the engine and

radiator are hot. Hot coolant and steam may blow out under pressure, causing serious injury.

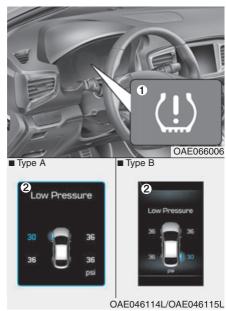
Turn the hybrid system off and wait until the engine cools down. Use extreme care when removing the engine coolant cap and/or inverter coolant cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.

- 7. If you cannot find the cause of the overheating, wait until the engine temperature has returned to normal. Then, if coolant has been lost, carefully add coolant to the reservoir to bring the fluid level in the reservoir up to the halfway mark.
- Proceed with caution, keeping alert for further signs of overheating. If overheating happens again, we recommend that you call an authorized HYUNDAI dealer for assistance.

#### **A** CAUTION

- Serious loss of coolant indicates a leak in the cooling system and we recommend the system be checked by an authorized HYUNDAI dealer.
- When the engine overheats from low engine coolant, suddenly adding engine coolant may cause cracks in the engine. To prevent damage, add engine coolant slowly in small quantities.

#### TIRE PRESSURE MONITORING SYSTEM (TPMS) (IF EQUIPPED)



- Low Tire Pressure Telltale/TPMS Malfunction Indicator
- (2) Low Tire Pressure Position
  Telltale and Tire Pressure Telltale
  (Shown on the LCD display)

## Check tire pressure (if equipped)



 You can check the tire pressure in the Information Mode (for cluster type A) or Assist Mode (for cluster type B) on the cluster.

## Refer to the "LCD Display Modes" in chapter 3.

- Tire pressure is displayed after a few minutes of driving after initial engine 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 LCD display.
  - psi, kpa, bar (Refer to the "User Settings Mode" section in chapter 3).

## Tire pressure monitoring system

#### **A** WARNING

Over-inflation or under-inflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure that may cause loss of vehicle control resulting in an accident.

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a tire pressure monitoring system (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure.

Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly.

Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

#### NOTICE

If any of the below happens, have the system checked by an authorized HYUNDAI dealer.

- 1. The Low Tire Pressure Telltale/ **TPMS Malfunction Indicator** does not illuminate for 3 seconds when the ignition switch is placed to the ON position or engine is running.
- 2. 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 and tire pressure telltale



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 will indicate which tire is significantly underinflated 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 the spare tire.

The Low Tire Pressure Telltale will remain on and the TPMS Malfunction. Indicator may blink for one minute and then remain illuminated (when the vehicle is driven approximately 10 minutes at speed above 25 km/h (15.5 mph)) until you have the low pressure tire repaired and replaced on the vehicle.

#### Information

The spare tire is not equipped with a tire pressure sensor.

#### **A** CAUTION

In winter or cold weather, the Low Tire Pressure Telltale may be illuminated if the tire pressure was adjusted to the recommended tire inflation pressure in warm weather. It does not mean vour TPMS is malfunctioning because the decreased temperature leads to a proportional lowering of tire pressure. When you drive your vehicle from a warm area to a cold area or from a cold area to a warm area, or the outside temperature is greatly higher or lower, you should check the tire inflation pressure and adjust the tires to the recommended tire inflation pressure.

#### **A** WARNING

#### Low pressure damage

Significantly low tire pressure makes the vehicle unstable and can contribute to loss of vehicle control and increased braking distances.

Continued driving on low pressure tires can cause the tires to overheat and fail.



# TPMS (Tire Pressure Monitoring System) malfunction indicator

The TPMS Malfunction Indicator will illuminate after it blinks for approximately one minute when there is a problem with the Tire Pressure Monitoring System.

Have the system checked by an authorized HYUNDAI dealer as soon as possible.

#### NOTICE

If there is a malfunction with the TPMS, the 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.

#### **A** CAUTION

Never use a puncture-repairing agent not approved by HYUNDAI dealer to repair and/or inflate a low pressure tire. Tire sealant not approved by HYUNDAI dealer may damage the tire pressure sensor.

The spare tire (if equipped) does not come with a tire pressure monitoring sensor. When the low pressure tire or the flat tire is replaced with the spare tire, the Low Tire Pressure Telltale will remain on. Also, the TPMS Malfunction Indicator will illuminate after blinking for one minute if the vehicle is driven at speed above 25 km/h (15.5 mph) for approximately 10 minutes.

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.

If the indicators do not extinguish after a few minutes, please visit an authorized HYUNDAI dealer.

Each wheel is equipped with a tire pressure sensor mounted inside the tire behind the valve stem (except for the spare tire). You must use TPMS specific wheels. It is recommended that you always have your tires serviced by an authorized HYUNDAI dealer.

You may not be able to identify a tire with low pressure by simply looking at it. Always use a good quality tire pressure gauge to measure. 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 1.6 km (1 mile) 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.

#### **A** WARNING

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

#### **A** WARNING

Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may interfere with the system's ability to warn the driver of low tire pressure conditions and/or TPMS malfunctions. Tampering with, modifying, or disabling the Tire Pressure Monitoring System (TPMS) components may void the warranty for that portion of the vehicle.

#### **A** WARNING

#### For EUROPE

- Do not modify the vehicle; it may interfere with the TPMS function.
- The wheels on the market do not have a TPMS sensor.
  - For your safety, we recommend that you use parts for replacement from an authorized HYUNDAI dealer.
- If you use the wheels on the market, use a TPMS sensor approved by a HYUNDAI dealer. If your vehicle is not equipped with a TPMS sensor or TPMS does not work properly, you may fail the periodic vehicle inspection conducted in your country.
- \*All vehicles sold in the EUROPE market during below period must be equipped with TPMS.
  - New model vehicle : Nov. 1, 2012 ~
  - Current model vehicle:
     Nov. 1, 2014~ (Based on vehicle registrations)

#### IF YOU HAVE A FLAT TIRE (WITH SPARE TIRE)

#### **A** WARNING

Changing a tire can be dangerous. Follow the instructions in this section when changing a tire to reduce the risk of serious injury or death.

#### **A** CAUTION

Be careful as you use the jack handle to stay clear of the flat end. The flat end has sharp edges that could cause cuts.

#### **Jack and tools**



- (1) Jack handle
- (2) Jack
- (3) Wheel lug nut wrench

The jack, jack handle, and wheel lug nut wrench are stored in the luggage compartment under the luggage box cover.

The jack is provided for emergency tire changing only.



Turn the winged hold down bolt counterclockwise to remove the spare tire.

Store the spare tire in the same compartment by turning the winged hold down bolt clockwise.

To prevent the spare tire and tools from "rattling", store them in their proper location.



If it is hard to loosen the tire holddown wing bolt by hand, you can loosen it easily using the jack handle.

- 1. Put the jack handle (1) inside of the tire hold-down wing bolt.
- Turn the tire hold-down wing bolt counterclockwise with the jack handle.

#### **Changing tires**

#### **WARNING**

A vehicle can slip or roll off of a jack causing serious injury or death to you or those nearby. Take the following safety precautions:

- Do not get under a vehicle that is supported by a jack.
- NEVER attempt to change a tire in the lane of traffic. ALWAYS move the vehicle completely off the road on level, firm ground away from traffic before trying to change a tire. If you cannot find a level, firm place off the road, call a towing service for assistance.
- Be sure to use the jack provided with the vehicle.
- ALWAYS place the jack on the designated jacking positions on the vehicle and NEVER on the bumpers or any other part of the vehicle for jacking support.

(Continued)

#### (Continued)

- Do not start or run the engine while the vehicle is on the jack.
- Do not allow anyone to remain in the vehicle while it is on the iack.
- Keep children away from the road and the vehicle.

Follow these steps to change your vehicle's tire:

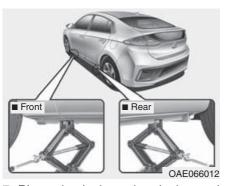
- 1. Park on a level, firm surface.
- Move the shift lever into P (Park), apply the parking brake, and place the ignition switch in the LOCK/ OFF position.
- Press the hazard warning flasher button
- 4. Remove the wheel lug nut wrench, jack, jack handle, and spare tire from the vehicle.



Block both the front and rear of the tire diagonally opposite of the tire you are changing.



Loosen the wheel lug nuts counterclockwise one turn each in the order shown above, but do not remove any lug nuts until the tire has been raised off of the ground.



7. Place the jack at the designated jacking position under the frame closest to the tire you are changing. The jacking positions are plates welded to the frame with two notches and two dimples. Never jack at any other position or part of the vehicle. It may damage the side seal molding.



8. Insert the jack handle into the jack and turn it clockwise, raising the vehicle until the tire clears the ground. Make sure the vehicle is stable on the jack.

- Loosen the lug nuts with the wheel lug nut wrench and remove them with your fingers. Remove the wheel from the studs and lay it flat on the ground out of the way. Remove any dirt or debris from the studs, mounting surfaces, and wheel.
- 10. Install the spare tire onto the studs of the hub.
- 11. Tighten the lug nuts with your fingers onto the studs with the smaller end of the lug nuts closest to the wheel.
- Lower the vehicle to the ground by turning the jack handle counterclockwise.



13. Use the wheel lug nut wrench to tighten the lug nuts in the order shown. Double-check each lug nut until they are tight. After changing tires, we recommend that an authorized HYUNDAI dealer tighten the lug nuts to their proper torque as soon as possible. The wheel lug nut should be tightened to 11~13 kgf.m (79~94 lbf.ft).

If you have a tire gauge, check the tire pressure (see "Tires and Wheels" in chapter 8 for tire pressure instructions.). If the pressure is lower or higher than recommended, drive slowly to the nearest service station and adjust it to the recommended pressure. Always reinstall the valve cap after checking or adjusting tire pressure. If the cap is not replaced, air may leak from the tire. If you lose a valve cap, buy another and install it as soon as possible. After changing tires, secure the flat tire and return the jack and tools to their proper storage locations.

#### NOTICE

Check the tire pressure as soon as possible after installing a spare tire. Adjust it to the recommended pressure.

#### **A** CAUTION

Your vehicle has metric threads on the studs and lug nuts. Make certain during tire changing that the same nuts that were removed are reinstalled. If you have to replace your lug nuts make sure they have metric threads to avoid damaging the studs and ensure the wheel is properly secured to the hub. We recommend that you consult an authorized HYUNDAI dealer for assistance.

If any of the equipment such as the jack, lug nuts, studs, or other equipment is damaged or in poor condition, do not attempt to change the tire and call for assistance.

Check and tighten the tire wheel lug nuts after driving over 50km if tires are replaced. Re-check the tire wheel lug nuts after driving over 1,000km.

## Use of compact spare tires (if equipped)

Compact spare tires are designed for emergency use only. Drive carefully on the compact spare tire and always follow the safety precautions.

#### **A** WARNING

To prevent compact spare tire failure and loss of control possibly resulting in an accident:

- Use the compact spare tire only in an emergency.
- NEVER operate your vehicle over 80 km/h (50 mph).
- Do not exceed the vehicle's maximum load rating or the load carrying capacity shown on the sidewall of the compact spare tire.
- Do not use the compact spare tire continuously. Repair or replace the original tire as soon as possible to avoid failure of the compact spare tire.

When driving with the compact spare tire mounted to your vehicle:

- Check the tire pressure after installing the compact spare tire.
   The compact spare tire should be inflated to 420 kPa (60 psi).
- Do not take this vehicle through an automatic car wash while the compact spare tire is installed.
- Do not use the compact spare tire on any other vehicle because this tire has been designed especially for your vehicle.
- The compact spare tire's tread life is shorter than a regular tire. Inspect your compact spare tire regularly and replace worn compact spare tires with the same size and design, mounted on the same wheel.
- Do not use more than one compact spare tire at a time.
- Do not tow a trailer while the compact spare tire is installed.

#### NOTICE

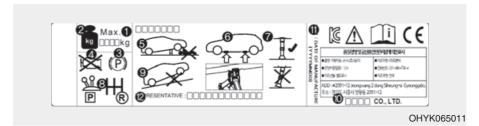
When the original tire and wheel are repaired and reinstalled on the vehicle, the lug nut torque must be set correctly. The correct lug nut tightening torque is 11~13 kgf.m (79~94 lbf.ft).

#### **A** CAUTION

To prevent damaging the compact spare tire and your vehicle:

- Drive slowly enough for the road conditions to avoid all hazards, such as a potholes or debris.
- Avoid driving over obstacles. The compact spare tire diameter is smaller than the diameter of a conventional tire and reduces the ground clearance approximately 25 mm (1 inch).
- Do not use tire chains on the compact spare tire. Because of the smaller size, a tire chain will not fit properly.
- Do not use the compact spare tire on any other wheels, nor should standard tires, snow tires, wheel covers or trim rings be used with the compact spare wheel.

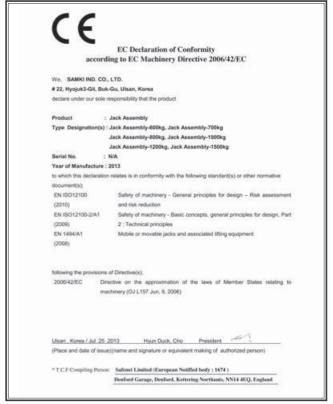
#### Jack label



The actual Jack label in the vehicle may differ from the illustration. For more detailed specifications, refer to the label attached to the jack.

- 1. Model Name
- 2. Maximum allowable load
- 3. When using the jack, set your parking brake.
- 4. When using the jack, stop the engine.
- 5. Do not get under a vehicle that is supported by a jack.
- 6. The designated locations under the frame
- 7. When supporting the vehicle, the base plate of jack must be vertical under the lifting point.
- 8. Shift into Reverse gear on vehicles with manual transmission or move the shift lever to the P position on vehicles with dual clutch transmission.
- 9. The jack should be used on firm level ground.
- 10. Jack manufacture
- 11. Production date
- 12. Representative company and address

#### **EC** Declaration of conformity for Jack



JACKDOC14S

### IF YOU HAVE A FLAT TIRE (WITH TIRE MOBILITY KIT, IF EQUIPPED)

#### Type A



For safe operation, carefully read and follow the instructions in this manual before use.

- (1) Compressor
- (2) Sealant bottle

The Tire Mobility Kit is a temporary fix to the tire and the tire should be inspected by an authorized HYUNDAI dealer as soon as possible.

#### **A** 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.

#### **A** 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.

#### **A** WARNING

Have your tire repaired as soon as possible. The tire may lose air pressure at any time after inflating with the Tire Mobility Kit.

#### Introduction

With the Tire Mobility Kit you stay mobile even after experiencing a tire puncture.

The compressor and sealing compound system effectively and comfortably seals most punctures in a passenger car tire caused by nails or similar objects and reinflates the tire.

After you ensure that the tire is properly sealed you can drive cautiously on the tire (distance up to 200 km (120 miles)) at a max. speed of (80 km/h (50 mph)) in order to reach a service station or tire dealer for the tire replacement.

It is possible that some tires, especially with larger punctures or damage to the sidewall, cannot be sealed completely.

Air pressure loss in the tire may adversely affect tire performance.

For this reason, you should avoid abrupt steering or other driving maneuvers, especially if the vehicle is heavily loaded or if a trailer is in use.

The Tire Mobility Kit is not designed or intended as a permanent tire repair method and is to be used for one tire only.

This instruction shows you step by step how to temporarily seal the puncture simply and reliably.

Read the section "Notes on the safe use of the Tire Mobility Kit".

#### **A** WARNING

Do not use the TMK if a tire is severely damaged by driving run flat or with insufficient air pressure.

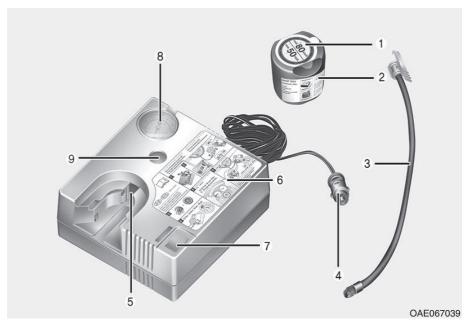
Only punctured areas located within the tread region of the tire can be sealed using the TMK.

#### 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 inch).
   Please contact the nearest
  - Hease contact the nearest HYUNDAI dealership if the tire cannot be made roadworthy with the Tire Mobility Kit.
- Do not use the Tire Mobility Kit if a tire is severely damaged by driving run flat or with insufficient air pressure.

- Do not remove any foreign objects such as nails or screws that have penetrated the tire.
- Provided the car is outdoors, leave the engine running. Otherwise operating the compressor may eventually drain the car battery.
- Never leave the Tire Mobility Kit unattended while it is being used.
- Do not leave the compressor running for more than 10 minutes at a time or it may overheat.
- Do not use the Tire Mobility Kit if the ambient temperature is below -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.

#### Components of the Tire Mobility Kit



- 1. Speed restriction label
- 2. Sealant bottle and label with speed restriction
- 3. Filling hose from sealant bottle to wheel
- 4. Connectors and cable for power outlet direct connection
- 5. Holder for the sealant bottle
- 6. Compressor
- 7. ON/OFF switch
- 8. Pressure gauge for displaying the tire inflation pressure
- 9. Button for reducing tire inflation pressure

Connectors, cable and connection hose are stored in the compressor housing.

Strictly follow the specified sequence, otherwise the sealant may escape under high pressure.

#### **A** WARNING

Do not use the tire sealant after the sealant has expired (i.e. pasted the expiration date on the sealant container). This can increase the risk of tire failure.

#### **A** WARNING

- Keep out of reach of children.
- Avoid contact with eyes.
- Do not swallow.

#### Using the Tire Mobility Kit

#### **⚠** WARNING



Detach the speed restriction label (1) from the sealant bottle (2), and place it in a highly visible place inside the vehicle such as on the steering wheel to remind the driver not to drive too fast.

1. Shake the sealant bottle (2).



OAFPH067041I

- 2. Screw the filling hose (3) onto the connector of the sealant bottle (2).
- 3. Insert the sealant bottle into the housing of the compressor (5) so that the bottle is upright.
- 4. Ensure that the button (9) on the compressor is not pressed.



- 5. Unscrew the valve cap from the valve of the flat tire and screw the filling hose (3) of the sealant bottle onto the valve.
- 6. Ensure that the compressor is switched OFF.

#### **A** CAUTION

Securely install the sealant filling hose to the valve. If not, sealant may flow backward, possibly clogging the filling hose.





- 7. Plug the compressor power cord (4) into the vehicle power outlet.
- 8. 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.

#### **A** CAUTION

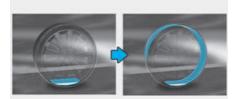
Do not attempt to drive your vehicle if the tire pressure is below 200 kpa (29 psi). This could result in an accident due to sudden tire failure.

- 9. Switch off the compressor.
- 10. Detach the hoses from the sealant bottle connector and from the tire valve

Return the Tire Mobility Kit to its storage location in the vehicle.

#### **A** WARNING

Do not leave your vehicle running in a poorly ventilated area for extended periods of time. Carbon monoxide poisoning and suffocation can occur.



OI MF064106

#### Distributing the sealant

11. Immediately drive approximately  $7\sim10$  km ( $4\sim6$  miles or about 10 minutes) to evenly distribute the sealant in the tire.

Do not exceed a speed of 80 km/h (50 mph). If possible, do not fall below a speed of 20 km/h (12 mph). While driving, if you experience any unusual vibration, ride disturbance or noise, reduce your speed and drive with caution until you can safely pull

Call for road side service or towing.

off of the side of the road.

#### Checking the tire inflation pressure

1. After driving approximately 7~10 km (4~6 miles or about 10 minutes), stop at a safe location.



OAEPH067041

2. Connect the filling hose (3) directly into the compressor.



- 3. Connect the other end of the filling hose (3) directly into the tire valve.
- 4. Plug the compressor power cord(4) into the vehicle power outlet.

5. Adjust the tire inflation pressure to the recommended tire inflation.

With the ignition switched 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.

#### *i* Information

The pressure gauge may show higher than actual reading when the compressor is running. To get an accurate tire pressure, the compressor needs to be turned off.

#### **A** 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 at an authorized dealer.

#### *i* 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).

#### Type B



For safe operation, carefully read and follow the instructions in this manual before use.

- (1) Compressor
- (2) Sealant bottle

The Tire Mobility Kit is a temporary fix to the tire and the tire should be inspected by an authorized HYUNDAI dealer as soon as possible.

#### **A** 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.

#### **A** WARNING

Have your tire repaired as soon as possible. The tire may lose air pressure at any time after inflating with the Tire Mobility Kit.

#### Introduction

With the Tire Mobility Kit you stay mobile even after experiencing a tire puncture.

The compressor and sealing compound system effectively and comfortably seals most punctures in a passenger car tire caused by nails or similar objects and reinflates the tire.

After you ensure that the tire is properly sealed you can drive cautiously on the tire (distance up to 200 km (120 miles)) at a max. speed of (80 km/h (50mph)) in order to reach a service station or tire dealer for the tire replacement.

It is possible that some tires, especially with larger punctures or damage to the sidewall, cannot be sealed completely.

Air pressure loss in the tire may adversely affect tire performance.

For this reason, you should avoid abrupt steering or other driving maneuvers, especially if the vehicle is heavily loaded or if a trailer is in use.

The Tire Mobility Kit is not designed or intended as a permanent tire repair method and is to be used for one tire only.

This instruction shows you step by step how to temporarily seal the puncture simply and reliably.

Read the section "Notes on the safe use of the Tire Mobility Kit".

#### **A** 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.

#### 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.

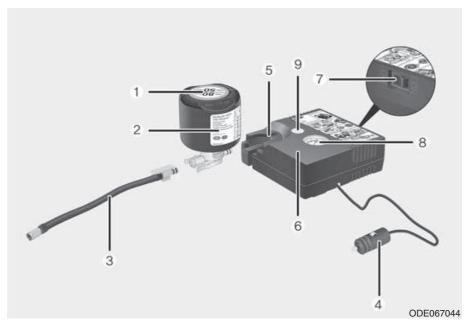
- To be sure your vehicle will not move, even when you're on fairly level ground, always set your parking brake.
- Only use the Tire Mobility Kit for sealing/inflation passenger car tires. Only punctured areas located within the tread region of the tire can be sealed using the tire mobility kit.
- Do 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 inch).

Please contact the nearest HYUNDAI dealership if the tire cannot be made roadworthy with the Tire Mobility Kit.

- Do not use the Tire Mobility Kit if a tire is severely damaged by driving run flat or with insufficient air pressure.
- Do not remove any foreign objects such as nails or screws that have penetrated the tire.

- Provided the car is outdoors, leave the engine running. Otherwise operating the compressor may eventually drain the car battery.
- Never leave the Tire Mobility Kit unattended while it is being used.
- Do not leave the compressor running for more than 10 minutes at a time or it may overheat.
- Do not use the Tire Mobility Kit if the ambient temperature is below -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.

#### Components of the Tire Mobility Kit



- 1. Speed restriction label
- 2. Sealant bottle and label with speed restriction
- 3. Filling hose from sealant bottle to wheel
- 4. Connectors and cable for power outlet direct connection
- 5. Holder for the sealant bottle
- 6. Compressor
- 7. ON/OFF switch
- 8. Pressure gauge for displaying the tire inflation pressure
- 9. Button for reducing tire inflation pressure

Connectors, cable and connection hose are stored in the compressor housing.

Strictly follow the specified sequence, otherwise the sealant may escape under high pressure.

#### **A** WARNING

Do not use the tire sealant after the sealant has expired (i.e. pasted the expiration date on the sealant container). This can increase the risk of tire failure.

#### **A** WARNING

- Keep out of reach of children.
- Avoid contact with eyes.
- Do not swallow.

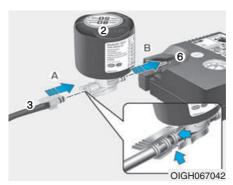
#### Using the Tire Mobility Kit

#### **A** WARNING



Detach the speed restriction label (1) from the sealant bottle (2), and place it in a highly visible place inside the vehicle such as on the steering wheel to remind the driver not to drive too fast.

1. Shake the sealant bottle (2).



- 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 and screw the filling hose (3) of the sealant bottle onto the valve.

#### **A** CAUTION

Securely install the sealant filling hose to the valve. If not, sealant may flow backward, possibly clogging the filling hose.





- Plug the compressor power cord
   into the vehicle power outlet.
- 6. With the 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.

#### **A** CAUTION

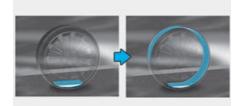
Do not attempt to drive your vehicle if the tire pressure is below 200 kpa (29 psi). This could result in an accident due to sudden tire failure.

- 7. Switch off the compressor.
- Detach the hoses from the sealant bottle connector and from the tire valve.

Return the Tire Mobility Kit to its storage location in the vehicle.

#### **A** WARNING

Do not leave your vehicle running in a poorly ventilated area for extended periods of time. Carbon monoxide poisoning and suffocation can occur.



OI MF064106

#### Distributing the sealant

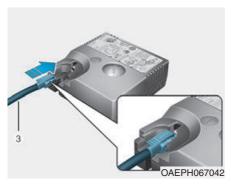
 Immediately drive approximately 7~10 km (4~6 miles or about 10 minutes) to evenly distribute the sealant in the tire.

Do not exceed a speed of 80 km/h (50 mph). If possible, do not fall below a speed of 20 km/h (12 mph). 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.

## Checking the tire inflation pressure

 After driving approximately 7~10 km (4~6 miles or about 10 minutes), stop at a safe location.



2. Connect the filling hose (3) directly into the compressor.



- 3. Connect the other end of the filling hose (3) directly into the tire valve.
- 4. Plug the compressor power cord(4) into the vehicle power outlet.

5. Adjust the tire inflation pressure to the recommended tire inflation.

With the ignition switched 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.

#### *i* Information

The pressure gauge may show higher than actual reading when the compressor is running. To get an accurate tire pressure, the compressor needs to be turned off.

#### **A** CAUTION

If the inflation pressure is not maintained, drive the vehicle a second time, refer to Distributing the sealant. Then repeat steps 1 to 4.

Use of the TMK may be ineffectual for tire damage larger than approximately 4 mm (0.16 in).

We recommend that you contact an authorized HYUNDAI dealer if the tire cannot be made roadworthy with the Tire Mobility Kit.

#### **A** 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.

#### **A** CAUTION

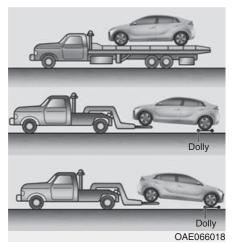
Tire pressure sensor (if equipped with TPMS)

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 at an authorized dealer.

#### *i* 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).

## **TOWING**Towing service



(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.

It is acceptable to tow the vehicle with the rear wheels on the ground

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.



OAE066020



OAE066019

If emergency towing is necessary, we recommend having 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.

#### **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. Place the ignition switch in the ACC position.
- 2. Place the shift lever in N (Neutral).
- 3. Release the parking brake.

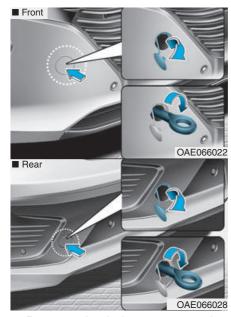
#### **A** CAUTION

Failure to place the shift lever in N (Neutral) may cause internal damage to the transmission.

#### Removable towing hook

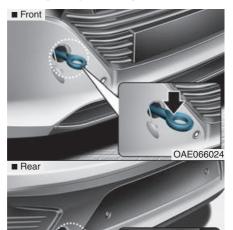


1. Open the tailgate, and remove the towing hook from the tool case.



- Remove the hole cover pressing the lower part of the cover on the bumper.
- 3. Install the towing hook by turning it clockwise into the hole until it is fully secured.
- 4. Remove the towing hook and install the cover after use.

#### **Emergency towing**



If towing is necessary, we recommend you have it done by an authorized HYUNDAI dealer or a commercial tow truck service.

OAF066023

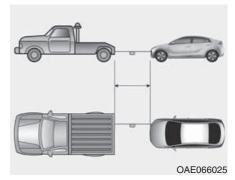
If a towing service is not available in an emergency, your vehicle may be temporarily towed using a cable or chain secured to the emergency towing hook at the front (or rear) of the vehicle.

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.

Always follow these emergency towing precautions:

- Place the ignition switch in the ACC position so the steering wheel is not locked.
- Place the shift lever in N (Neutral).
- Release the parking brake.
- Depress the brake pedal with more force than normal since you will have reduced braking performance.
- More steering effort will be required because the power steering system will be disabled.
- Use a vehicle heavier than your own to tow your vehicle.
- The drivers of both vehicles should communicate with each other frequently.
- Before emergency towing, check that the hook is not broken or damaged.
- Fasten the towing cable or chain securely to the hook.
- Do not jerk the hook. Apply steady and even force.



- 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 dual clutch transmission for fluid leaks under your vehicle. If the dual clutch transmission fluid is leaking, flatbed equipment or a towing dolly must be used.

## **A** CAUTION

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 15 km/h (10 mph) and drive less than 1.5 km (1 mile) when towing to avoid serious damage to the dual clutch transmission.

#### EMERGENCY COMMODITY (IF EQUIPPED)

Your vehicle is equipped with emergency commodities to help you respond to emergency situation.

### Fire extinguisher

If there is small fire and you know how to use the fire extinguisher, follow these steps carefully.

- Pull out the safety pin at the top of the extinguisher that keeps the handle from being accidentally pressed.
- 2. Aim the nozzle towards the base of the fire.
- Stand approximately 2.5 m (8 ft) away from the fire and squeeze the handle to discharge the extinguisher. If you release the handle, the discharge will stop.
- 4. Sweep the nozzle back and forth at the base of the fire. After the fire appears to be out, watch carefully since it may re-ignite.

#### First aid kit

Supplies for use in giving first aid such as scissors, bandage and adhesive tape, etc. are provided.

### **Triangle reflector**

Place the triangle reflector on the road to warn oncoming vehicles during emergencies, such as when the vehicle is parked by the roadside due to problems.

## Tire pressure gauge (if equipped)

Tires normally lose some air in dayto-day use, and you may have to add a air periodically and usually it is not a sign of a leaking tire, but of normal wear. Always check tire pressure when the tires are cold because tire pressure increases with temperature. To check the tire pressure, take the following steps:

- Unscrew the inflation valve cap that is located on the rim of the tire.
- 2. Press and hold the gauge against the tire valve. Some air will leak as you begin and more will leak if you don't press the gauge in firmly.
- 3. A firm non-leaking push will activate the gauge.
- 4. Read the tire pressure on the gauge to see whether the tire pressure is low or high.
- 5. Adjust the tire pressure to the specified pressure. Refer to "Tires and Wheels" in chapter 8.
- 6. Reinstall the inflation valve cap.

## Maintenance

| Engine compartment                        | 7-3     |
|---|---------|
| Maintenance services                      | 7-5     |
| Owner's responsibility                    | 7-5     |
| Owner maintenance precautions             |         |
| Owner maintenance                         | 7-6     |
| How to Disconnect the (-) Cable           |         |
| for Regular Maintenance                   | 7-6     |
| Owner maintenance schedule                |         |
| Scheduled maintenance services            | 7-8     |
| Normal maintenance schedule               |         |
| - For Europe (except Russia)              | 7-9     |
| Maintenance under severe usage conditions |         |
| - For Europe (except Russia)              | 7-13    |
| Normal maintenance schedule               |         |
| – Except Europe (but include Russia)      | 7-15    |
| Maintenance under severe usage conditions |         |
| – Except Europe (but include Russia)      |         |
| Explanation of scheduled maintenance ite  | ms.7-21 |
| Engine oil                                | 7-23    |
| Checking the engine oil level             |         |
| Checking the engine oil and filter        | 7-24    |
| Engine coolant/inverter coolant           | 7-25    |
| Checking the coolant level                |         |
| Changing coolant                          |         |

| Hybrid starter & generator (HSG) belt<br>Checking the hybrid starter & | 7-29 |
|--|------|
| generator (HSG) belt   | 7-29 |
| Brake fluid  | 7-29 |
| Checking the brake fluid level   |      |
| Washer fluid   |      |
| Checking the washer fluid level  |      |
| Parking brake  |      |
| Checking the parking brake   |      |
| Air cleaner  |      |
| Filter replacement   |      |
| Climate control air filter   |      |
| Filter inspection  |      |
| Wiper blades   |      |
| Blade inspection   |      |
| Blade replacement  |      |
| Battery (12 volt, Plug-in hybrid vehicle)                              |      |
| For best battery service   |      |
| Battery capacity label   |      |
| Battery recharging   |      |
| Reset features   |      |

| Tiros and whools 7–42                         | Light hulbs 7–67   |
|---|--|
| Tires and wheels                              | Light bulbs7-67 Headlamp, position lamp, turn signal lamp bulb |
| Recommended cold tire inflation pressures7–43 |  |
|   | replacement  |
| Check tire inflation pressure7-44             | Headlamp aiming (For Europe)7-72                               |
| Tire rotation7–45                             | Daytime running lamp7-76                                       |
| Wheel alignment and tire balance7–46          | Side repeater lamp replacement7-76                             |
| Tire replacement7-46                          | Rear combination lamp bulb replacement7-77                     |
| Wheel replacement7-47                         | Rear fog lamp7-82  |
| Tire traction7-47                             | High mounted stop lamp7-82                                     |
| Tire maintenance7-48                          | License plate light bulb replacement7–82                       |
| Tire sidewall labeling7-48                    | Interior light bulb replacement7-82                            |
| Low aspect ratio tires7-52                    | Appearance care7-84  |
| Fuses7-53                                     | Exterior care7-84  |
| Instrument panel fuse replacement7-54         | Exterior care7-84<br>Interior care7-89                         |
| Engine compartment panel fuse replacement7-55 | Emission control system7-91                                    |
| Fuse/relay panel description7-57              | Crankcase emission control system7-92                          |
|   | Evaporative emission control system7-92                        |
|   | Exhaust emission control system7-92                            |
|   | Procedure for entering forced engine                           |
|   | activation mode7-95  |

## **ENGINE COMPARTMENT**

■ Hybrid vehicle



- 1. Engine oil filler cap
- 2. Engine oil dipstick
- 3. Engine coolant cap
- 4. Engine coolant reservoir
- 5. Inverter coolant reservoir
- 6. Brake fluid reservoir
- 7. Air cleaner
- 8. Windshield washer fluid reservoir
- 9. Fuse box

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

OAE076001

#### ■ Plug-in hybrid vehicle



- 1. Engine oil filler cap
- 2. Engine oil dipstick
- 3. Engine coolant cap
- 4. Engine coolant reservoir
- 5. Inverter coolant reservoir
- 6. Brake fluid reservoir
- 7. Air cleaner
- 8. Windshield washer fluid reservoir
- 9. Fuse box

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

OAEPH076001

#### 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.

We recommend you 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 Service Passport.

Repairs and adjustments required as a result of improper maintenance or a lack of required maintenance are not covered.

## Owner maintenance precautions

Inadequate, incomplete or insufficient servicing may result in operational problems with your vehicle that could lead to vehicle damage, an accident, or personal injury. This chapter provides instructions only for the maintenance items that are easy to perform. Several procedures can be done only by an authorized HYUNDAI dealer with special tools.

Your vehicle should not be modified in any way. Such modifications may adversely affect the performance, safety or durability of your vehicle and may, in addition, violate conditions of the limited warranties covering the vehicle.

#### NOTICE

Improper owner maintenance during the warranty period may affect warranty coverage. For details, read the separate Service Passport provided with the vehicle. If you're unsure about any service or maintenance procedure, have it done by an authorized HYUNDAI dealer.

#### OWNER MAINTENANCE

## **A** WARNING

Performing maintenance work on a vehicle can be dangerous. If you lack sufficient knowledge and experience or the proper tools and equipment to do the work, have it done by an authorized HYUNDAI dealer. ALWAYS follow these precautions for performing maintenance work:

- Park your vehicle on level ground, move the shift lever into the P (Park) position, apply the parking brake, and place the ignition switch in the LOCK/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.

(Continued)

### (Continued)

- If you must run the engine during maintenance, do so out doors or in an area with plenty of ventilation.
- Keep flames, sparks, or smoking materials away from the battery and fuel-related parts.

The following lists are vehicle checks and inspections that should be performed by the owner or an authorized HYUNDAI dealer at the frequencies indicated to help ensure safe, dependable operation of your vehicle.

Any adverse conditions should be brought to the attention of your dealer as soon as possible.

These Owner Maintenance vehicle checks are generally not covered by warranties and you may be charged for labor, parts and lubricants used.

## How to Disconnect the (-) Cable for Regular Maintenance

When the vehicle is under regular maintenance, make sure to separate the (-) cable before maintenance.



Separate the (-) cable following the below instructions.

- 1. Fold the rear left side seat.
- 2. Remove the service cover (A) on the luggage trim.
- Separate the (-) cable (B).
   Reassemble in the reverse order.

#### Owner maintenance schedule

#### When you stop for fuel:

- Check the engine oil level.
- Check the coolant level in the engine coolant reservoir.
- Check the windshield washer fluid level.
- Check for low or under-inflated tires.

#### **A** WARNING

Be careful when checking your engine coolant/inverter coolant level when the engine is hot. This may result in coolant being blown out of the opening and cause serious burns and other injuries.

## While operating your vehicle:

- Note any changes in the sound of the exhaust or any smell of exhaust fumes in the vehicle.
- Check for vibrations in the steering wheel. Notice if there is any increased steering effort or looseness in the steering wheel, or change in its straight-ahead position.
- Notice if your vehicle constantly turns slightly or "pulls" to one side when traveling on smooth, level road.
- When stopping, listen and check for unusual sounds, pulling to one side, increased brake pedal travel or "hard-to-push" brake pedal.
- If any slipping or changes in the operation of your transmission occurs, check the transmission fluid level.
- Check the dual clutch transmission 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 engine 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.
- Check for loose wheel lug nuts.

## At least twice a year: (i.e., 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 headlamp alignment.
- Check muffler, exhaust pipes, shields and clamps.
- 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 dual clutch transmission 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 8 km (5 miles) in normal temperature or less than 16 km (10miles) in freezing temperature
- Extensive engine idling or low speed driving for long distances
- Driving on rough, dusty, muddy, unpaved, graveled or salt-spread roads
- Driving in areas using salt or other corrosive materials or in very cold weather
- · Driving in heavy dust condition
- Driving in heavy traffic area
- Driving on uphill, downhill, or mountain road repeatedly
- Towing a trailer or using a camper, or roof rack
- Driving as a patrol car, taxi, other commercial use of vehicle towing
- Driving over 170 km/h (106 miles/h)
- Frequently driving in stop-and-go condition

If your vehicle is operated under the above conditions, you should inspect, replace or refill more frequently than the following Normal Maintenance Schedule. After the periods or distance shown in the chart, continue to follow the prescribed maintenance intervals.

The following maintenance services must be performed to ensure good emission control and performance.

Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

| MAINTENANCE                         |             |   |    |    |    |    |    |     |     |  |
|-------------------------------------|-------------|---|----|----|----|----|----|-----|-----|--|
| INTERVALS                           | Months      | 12  | 24 | 36 | 48 | 60 | 72 | 84  | 96  |  |
| IVIAINIENANCE                       | Miles×1,000 | 10  | 20 | 30 | 40 | 50 | 60 | 70  | 80  |  |
|                                     | Km×1,000    | 15  | 30 | 45 | 60 | 75 | 90 | 105 | 120 |  |
| Engine oil and engine oil filter *1 |             | R   | R  | R  | R  | R  | R  | R   | R   |  |
| Air cleaner filter                  |             | I   | I  | R  | I  | I  | R  | I   | I   |  |
| Fuel additives *2                   |             | Add every 15,000 km (10,000 miles) or 12 months |    |    |    |    |    |     |     |  |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

\*1 : Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.

\*2 : If good quality gasolines meet Europe Fuel standards (EN228) or equivalents including fuel additives is not available, one bottle of additive is recommended. Additives are available from your authorized HYUNDAI dealer along with information on how to use them. Do not mix other additives.

| MAINTENANCE                              |             | mber of n                                | nonths o  | driving o | distance, | whicheve | er comes | first |     |  |
|--|-------------|--|---|-----------|-----------|----------|----------|-------|-----|--|
| INTERVALS                                | Months      | 12                                       | 24  | 36        | 48        | 60       | 72       | 84    | 96  |  |
| MAINTENANCE                              | Miles×1,000 | 10                                       | 20  | 30        | 40        | 50       | 60       | 70    | 80  |  |
| ITEM                                     | Km×1,000    | 15                                       | 30  | 45        | 60        | 75       | 90       | 105   | 120 |  |
| Spark plugs *3                           |             | Replace every 165,000 km (102,500 miles) |   |           |           |          |          |       |     |  |
| Vapor hose and fuel filler cap           |             |  |   |           | I         |          |          |       | I   |  |
| Fuel tank air filter                     |             |  |   |           | I         |          |          |       | I   |  |
| Vacuum hose                              |             | I  | I   | I         | I         | I        | I        | I     | I   |  |
| Fuel filter *4                           |             |  |   |           | I         |          |          |       | I   |  |
| Fuel lines, hoses and connections        |             |  |   |           | I         |          |          |       | I   |  |
| HSG (Hybrid Starter & Generator) belt *5 |             |  | Inspect every 15,000 km (10,000 miles) or 12 months, and replace every 105,000 km (70,000 miles) or 48 months |           |           |          |          |       |     |  |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

\*3 : For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

\*5: Inspect HSG belt for evidence of cuts, crocks, excessive wear or oil saturation and replace if necessary. If drive belt noise occurred, readjust drive belt tension before replace.

<sup>\*4 :</sup> The fuel filter is considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality. If there are some important matters like fuel flow restriction, surging, loss of power, hard starting problem etc, we recommend replacing the fuel filter immediately regardless of maintenance schedule and consulting with an authorized HYUNDAI dealer for details.

| MAINTENANCE                       |                 |  |             |            |            |           |             |           |     |  |
|-----------------------------------|-----------------|--|-------------|------------|------------|-----------|-------------|-----------|-----|--|
| INTERVALS                         | Months          | 12   | 24          | 36         | 48         | 60        | 72          | 84        | 96  |  |
| MAINTENANCE                       | Miles×1,000     | 10   | 20          | 30         | 40         | 50        | 60          | 70        | 80  |  |
| ITEM                              | Km×1,000        | 15   | 30          | 45         | 60         | 75        | 90          | 105       | 120 |  |
|                                   |                 |  | Inspect     | "Coolant   | level adju | stment an | d leak" ev  | ery day   |     |  |
| Cooling system                    |                 | _  |             |            | ),000 km ( |           |             |           |     |  |
|                                   |                 | aft  | er that, in | spect ever | y 30,000   | km (20,00 | 00 miles) o | or 24 mon | ths |  |
| Engine coolant / Inverter coolan  | t *6            | At first, replace 210,000 km (140,000 miles) or 120 months after that, replace every 30,000 km (20,000 miles) or 24 months*7 |             |            |            |           |             |           |     |  |
| Dual clutch transmission fluid *8 |                 |  |             |            | I          |           |             |           | I   |  |
| Engine clutch actuator fluid      |                 | I  | R           | I          | R          | ı         | R           | I         | R   |  |
| Engine clutch actuator hose and   | d line          | I  | I           | I          | I          | I         | I           | I         | I   |  |
| Battery condition (12V, Plug-in h | nybrid vehicle) | I  | I           | I          | I          | I         | I           | I         | I   |  |
| Brake lines, hoses and connecti   | ons             | I  | I           | I          | I          | ı         | I           | I         | I   |  |
| Brake pedal                       |                 |  | I           |            | I          |           | I           |           | I   |  |
| Parking brake                     |                 |  | I           |            | I          |           | I           |           | I   |  |
| Brake fluid                       |                 | I  | R           | I          | R          | I         | R           | I         | R   |  |
| Brake discs and pads              |                 | I  | Ī           | I          | Ī          | I         | I           | I         | I   |  |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

<sup>\*6:</sup> When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory.

An improper coolant mixture can result in serious malfunction or engine damage.

<sup>\*7 :</sup> For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

<sup>\*8 :</sup> Dual clutch transmission (DCT) fluid should be changed anytime it has been submerged in water.

| MAINTENANCE                           | Number of months or driving distance, whichever comes first |    |    |    |    |    |    |     |     |  |
|---------------------------------------|---|----|----|----|----|----|----|-----|-----|--|
| INTERVALS                             | Months  | 12 | 24 | 36 | 48 | 60 | 72 | 84  | 96  |  |
| MAINTENANCE                           | Miles×1,000   | 10 | 20 | 30 | 40 | 50 | 60 | 70  | 80  |  |
| ITEM                                  | Km×1,000  | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 |  |
| Steering gear rack, linkage and boots |   | I  | I  | I  | I  | I  | I  | I   | I   |  |
| Driveshaft and boots                  |   |    | I  |    | I  |    | I  |     | I   |  |
| Tire (pressure & tread wear)          |   | I  | I  | I  | I  | I  | I  | I   | I   |  |
| Front suspension ball joints          |   | I  | I  | I  | I  | I  | I  | I   | I   |  |
| Bolt and nuts on chassis and bo       | ody   | I  | I  | I  | I  | I  | I  | I   | I   |  |
| Air conditioner refrigerant           |   | I  | I  | I  | I  | I  | I  | I   | I   |  |
| Air conditioner compressor            |   | I  | I  | I  | I  | I  | I  | I   | I   |  |
| Climate control air filter            |   |    | R  |    | R  |    | R  |     | R   |  |
| Exhaust system                        |   |    | I  |    | I  |    | I  |     | I   |  |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

### Maintenance under severe usage conditions - For Europe (except Russia)

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                  |  |
|---------------------------------------|-----------------------|--|------------------------------------|--|
| Engine oil and engine oil filter      | R                     | Replace every 7,500 km (5,000 miles) or 6 months   | A, B, C, D, E,<br>F, G, H, I, J, K |  |
| Air cleaner filter                    | R                     | Replace more frequently depending on the condition | C, E                               |  |
| Spark plugs                           | R                     | Replace more frequently depending on the condition | A, B, H, I                         |  |
| 1100 (111 110)                        | R                     | Every 45,000 km (30,000 miles)<br>or 24 months     | C, D, E, K                         |  |
| HSG (Hybrid Starter & Generator) belt | I                     | Every 15,000 km (10,000 miles)<br>or 12 months     | - C, D, E, K                       |  |
| Dual clutch transmission fluid        | R                     | Every 120,000 km (80,000 miles)                    | C, D, E, F,<br>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                      |  |

## Maintenance under severe usage conditions - For Europe (except Russia)

| Maintenance item                          | Maintenance operation | Maintenance intervals                              | Driving condition   |
|---|-----------------------|--|---------------------|
| Disc brakes and pads, calipers and rotors | I                     | Inspect more frequently depending on the condition | C, D, E, G, H       |
| Parking brake                             | I                     | Inspect more frequently depending on the condition | C, D, G, H          |
| Driveshaft and boots                      | I                     | Inspect more frequently depending on the condition | C, D, E, F, G, H, I |
| Climate control air filter                | R                     | Replace more frequently depending on the condition | C, E                |

#### Severe driving conditions

- A : Repeatedly driving short distance of less than 8 km (5 miles) in normal temperature or less than 16 km (10 miles) in freezing temperature
- B: Extensive engine idling or 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 170 km/h (106 mile/h)
- K: Frequently driving in stop-and-go conditions

The following maintenance services must be performed to ensure good emission control and performance.

Keep receipts for all vehicle emission services to protect your warranty. Where both mileage and time are shown, the frequency of service is determined by whichever occurs first.

| MAINTENANCE                         | Number of months or driving distance, whichever comes first |  |    |    |    |    |    |     |     |  |
|-------------------------------------|---|--|----|----|----|----|----|-----|-----|--|
| INTERVALS                           | Months  | 12   | 24 | 36 | 48 | 60 | 72 | 84  | 96  |  |
| MAINTENANCE                         | Miles×1,000   | 10   | 20 | 30 | 40 | 50 | 60 | 70  | 80  |  |
| ITEM                                | Km×1,000  | 15   | 30 | 45 | 60 | 75 | 90 | 105 | 120 |  |
| Engine oil and engine oil filter *1 | For Middle East *2,<br>Central & South America              | Replace every 10,000 km (6,000 miles) or 12 months |    |    |    |    |    |     |     |  |
|                                     | Except Middle East *2,<br>Central & South America           | R  | R  | R  | R  | R  | R  | R   | R   |  |
| F 1 11:1: +2                        | For Middle East *2,<br>Central & South America              | Replace every 10,000 km (6,000 miles) or 12 months |    |    |    |    |    |     |     |  |
| Fuel additives *3                   | Except Middle East *2,<br>Central & South America           | R  | R  | R  | R  | R  | R  | R   | R   |  |
| Air cleaner filter                  | For Middle East *2  | R  | R  | R  | R  | R  | R  | R   | R   |  |
|                                     | Except Middle East *2                                       | I  | I  | R  | I  | I  | R  | I   | I   |  |

<sup>1 :</sup> Inspect and if necessary, adjust, correct, clean or replace.

R: Replace or change.

<sup>\*1 :</sup> Check the engine oil level and leak every 500 km (350 miles) or before starting a long trip.

 $<sup>^{\</sup>star_2}$ : Middle East includes Libya, Algeria, Morocco, Tunisia, Sudan, Egypt and Iran.

<sup>\*3 :</sup> If good quality gasolines meet Europe Fuel standards (EN228) or equivalents including fuel additives is not available, one bottle of additive is recommended. Additives are available from your authorized HYUNDAI dealer along with information on how to use them. Do not mix other additives.

| MAINTENANCE                              |             | mber of n  | nonths o                                 | driving o | distance, | whicheve | er comes | first |     |  |  |
|--|-------------|--|--|-----------|-----------|----------|----------|-------|-----|--|--|
| INTERVALS                                | Months      | 12   | 24                                       | 36        | 48        | 60       | 72       | 84    | 96  |  |  |
| MAINTENANCE<br>ITEM                      | Miles×1,000 | 10   | 20                                       | 30        | 40        | 50       | 60       | 70    | 80  |  |  |
|  | Km×1,000    | 15   | 30                                       | 45        | 60        | 75       | 90       | 105   | 120 |  |  |
| Spark plugs *4                           |             |  | Replace every 165,000 km (102,500 miles) |           |           |          |          |       |     |  |  |
| Vapor hose and fuel filler cap           |             |  |  |           | I         |          |          |       | I   |  |  |
| Fuel tank air filter                     |             |  | I  |           | R         |          | I        |       | R   |  |  |
| Vacuum hose                              |             | I  | I  | I         | I         | I        | I        | I     | I   |  |  |
| Fuel filter *5                           |             |  | I  |           | R         |          | I        |       | R   |  |  |
| Fuel lines, hoses and connections        |             |  |  |           | I         |          |          |       | I   |  |  |
| HSG (Hybrid Starter & Generator) belt *6 |             | Inspect every 15,000 km (10,000 miles) or 12 months, and replace every 105,000km (70,000 miles) or 48 months |  |           |           |          |          |       |     |  |  |

<sup>1 :</sup> Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

<sup>\*4:</sup> For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

<sup>\*5 :</sup> The fuel filter is considered to be maintenance free but periodic inspection is recommended for this maintenance schedule depends on fuel quality. If there are some important matters like fuel flow restriction, surging, loss of power, hard starting problem etc, we recommend replacing the fuel filter immediately regardless of maintenance schedule and consulting with an authorized HYUNDAI dealer for details.

<sup>\*6:</sup> Inspect HSG belt for evidence of cuts, crocks, excessive wear or oil saturation and replace if necessary. If drive belt noise occurred, readjust drive belt tension before replace.

| MAINTENANCE                       | Number of months or driving distance, whichever comes first  |   |         |             |   |            |             |         |     |  |
|-----------------------------------|--|---|---------|-------------|---|------------|-------------|---------|-----|--|
| INTERVALS                         | Months   | 12  | 24      | 36          | 48  | 60         | 72          | 84      | 96  |  |
| MAINTENANCE                       | Miles×1,000  | 10  | 20      | 30          | 40  | 50         | 60          | 70      | 80  |  |
| ITEM                              | Km×1,000   | 15  | 30      | 45          | 60  | 75         | 90          | 105     | 120 |  |
|                                   |  |   | Inspect | "Coolant    | level adju  | stment an  | d leak" ev  | ery day |     |  |
| Cooling system                    |  | · ·   |         |             | (40,000 miles) or 48 months<br>km (20,000 miles) or 24 months |            |             |         |     |  |
| Engine coolant / Inverter coolan  | At first, replace 210,000 km (140,000 miles) or 120 months after that, replace every 30,000 km (20,000 miles) or 24 months*8 |   |         |             |   |            |             |         |     |  |
| Dual clutch transmission fluid *9 |  |   |         |             | I   |            |             |         | I   |  |
| Engine clutch actuator fluid      |  | Replace every 40,000 km (26,000 miles) or 24 months |         |             |   |            |             |         |     |  |
| Engine clutch actuator hose and   | lline  | I   | I       | I           | I   | I          | I           | I       | I   |  |
| Battery condition                 | For Middle East  |   | Insped  | ct every 10 | 0,000 km  | (6,000 mil | les) or 6 n | nonths  |     |  |
| Battery condition                 | Except Europe  | I   | I       | I           | I   | I          | I           | I       | I   |  |
| Brake lines, hoses and connecti   | ons  | I   | I       | I           | I   | I          | I           | I       | I   |  |
| Brake pedal                       |  |   | I       |             | I   |            | I           |         | I   |  |
| Parking brake                     |  |   | I       |             | I   |            | I           |         | I   |  |
| Brake fluid                       |  | I R I R I R I                                       |         |             | I   | R          |             |         |     |  |
| Brake discs and pads              |  | I   | I       | I           | I   | I          | I           | I       | I   |  |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

<sup>\*7:</sup> When adding coolant, use only deionized water or soft water for your vehicle and never mix hard water in the coolant filled at the factory.

An improper coolant mixture can result in serious malfunction or engine damage.

<sup>\*8 :</sup> For your convenience, it can be replaced prior to it's interval when you do maintenance of other items.

<sup>\*9:</sup> Dual clutch transmission (DCT) fluid should be changed anytime it has been submerged in water.

| MAINTENANCE                           | · · · · · · · · · · · · · · · · · · · |    |    |    |    |    |    |     |     |
|---------------------------------------|---------------------------------------|----|----|----|----|----|----|-----|-----|
| INTERVALS                             | Months                                | 12 | 24 | 36 | 48 | 60 | 72 | 84  | 96  |
| MAINTENANCE                           | Miles×1,000                           | 10 | 20 | 30 | 40 | 50 | 60 | 70  | 80  |
| ITEM                                  | Km×1,000                              | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 |
| Steering gear rack, linkage and boots |                                       | I  | I  | I  | I  | I  | I  | I   | I   |
| Driveshaft and boots                  |                                       |    | I  |    | I  |    | I  |     | I   |
| Tire (pressure & tread wear)          |                                       | I  | I  | I  | I  | I  | I  | I   | I   |
| Front suspension ball joints          |                                       | I  | I  | I  | I  | I  | I  | I   | I   |
| Bolt and nuts on chassis and body     |                                       | I  | I  | ı  | I  | ı  | I  | I   | I   |
| Air conditioner refrigerant           |                                       | I  | I  | I  | I  | I  | I  | I   | I   |
| Air conditioner compressor            |                                       | I  | I  | I  | I  | I  | I  | I   | I   |
| Climate control air filter            |                                       | R  | R  | R  | R  | R  | R  | R   | R   |
| Exhaust system                        |                                       |    | I  |    | I  |    | I  |     | I   |

I : Inspect and if necessary, adjust, correct, clean or replace.

R : Replace or change.

## Maintenance under severe usage conditions - Except Europe (but include Russia)

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                  |  |
|--|--|-----------------------|--|------------------------------------|--|
| Engine oil and                           | For Middle East *1,<br>Central & South<br>America    | R                     | Replace every 5,000 km (3,000 miles) or 6 months   | A, B, C, D, E,<br>F, G, H, I, J, K |  |
| engine oil filter                        | Except Middle East *1,<br>Central & South<br>America | R                     | Replace every 7,500 km (5,000 miles) or 6 months   |                                    |  |
| Air cleaner filter                       |  | R                     | Replace more frequently depending on the condition | C, E                               |  |
| Spark plugs                              |  | R                     | Replace more frequently depending on the condition | A, B, H, I                         |  |
| HSG (Hybrid Starter &<br>Generator) belt | For Middle East *1,<br>Central & South<br>America    | R                     | Every 30,000 km (20,000 miles) or 24 months        |                                    |  |
|  |  | I                     | Every 10,000 km (6,000 miles) or 12 months         | C, D, E, K                         |  |
|  | Except Middle East *1,<br>Central & South<br>America | R                     | Every 45,000 km (30,000 miles) or 24 months        |                                    |  |
|  |  | I                     | Every 15,000 km (10,000 miles) or 12 months        |                                    |  |
| Dual clutch transmission fluid           |  | R                     | Every 120,000 km (80,000 miles)                    | C, D, E, F, G, H, I, J             |  |

<sup>\*1 :</sup> Middle East includes Libya, Algeria, Morocco, Tunisia, Sudan, Egypt and Iran.

## Maintenance under severe usage conditions - Except Europe (but include Russia)

| Maintenance item                          | Maintenance operation | Maintenance intervals                              | Driving condition   |
|---|-----------------------|--|---------------------|
| 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       |
| Parking brake                             | I                     | Inspect more frequently depending on the condition | C, D, G, H          |
| Driveshaft and boots                      | I                     | Inspect more frequently depending on the condition | C, D, E, F, G, H, I |
| Climate control air filter                | R                     | Replace more frequently depending on the condition | C, E                |

#### Severe driving conditions

- A : Repeatedly driving short distance of less than 8 km (5 miles) in normal temperature or less than 16 km (10 miles) in freezing temperature
- B: Extensive engine idling or 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 170 km/h (106 mile/h)
- K: Frequently driving in stop-and-go conditions

#### **EXPLANATION OF SCHEDULED MAINTENANCE ITEMS**

## **Engine oil and filter**

The engine oil and filter should be changed at the intervals specified in the maintenance schedule. If the vehicle is being driven in severe conditions, more frequent oil and filter changes are required.

## **HSG (Hybrid starter & generator) belt**

The HSG belt should be changed at the intervals specified in the maintenance schedule.

## Fuel lines, fuel hoses and connections

Check the fuel lines, fuel hoses and connections for leakage and damage. We recommend an authorized HYUNDAI dealer replace any damaged or leaking parts immediately.

#### **Fuel filter**

A clogged filter can limit the speed at which the vehicle may be driven, damage the emission system and cause multiple issues such as hard starting. If an excessive amount of foreign matter accumulates in the fuel tank, the filter may require replacement more frequently. After installing a new filter, run the engine for several minutes, and check for leaks at the connections. Fuel filters should be installed by an authorized HYUNDAI dealer.

## Vapor hose and fuel filler cap

The vapor hose and fuel filler cap should be inspected at those intervals specified in the maintenance schedule. Make sure a new vapor hose or fuel filler cap is correctly replaced.

#### Air cleaner filter

A genuine HYUNDAI air cleaner filter is recommended when the filter is replaced.

## **Spark plugs**

Make sure to install new spark plugs of the correct heat range.

## Cooling system

Check cooling system components, such as radiator, coolant reservoir, hoses and connections for leakage and damage. Replace any damaged parts.

## Engine coolant/inverter coolant

The coolant should be changed at the intervals specified in the maintenance schedule.

#### **Dual clutch transmission fluid**

The dual clutch transmission fluid should be inspected according to the intervals specified in the maintenance schedule.

## **Engine clutch actuator fluid**

The engine clutch actuator fluid level should be inspected or replaced 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 the MIN and the MAX marks on the side of the reservoir. Use only hydraulic brake fluid conforming to DOT 3 or DOT 4 specification.

## **Parking brake**

Inspect the parking brake system including the parking brake pedal and cables.

## Brake discs, pads, calipers and rotors

Check the pads, the disc, and the rotor for any excessive wear-out. Inspect calipers for any fluid leakage For more information on checking the pads or lining wear limit, refer to the HYUNDAI web site.

(http://service.hyundai-motor.com)

## **Exhaust pipe and muffler**

Visually inspect the exhaust pipes, muffler and hangers for cracks, deterioration, or damage. Start the engine and listen carefully for any exhaust gas leakage. Tighten connections or replace parts as necessary.

### **Suspension mounting bolts**

Check the suspension connections for looseness or damage. Retighten to the specified torque.

## Steering gear box, linkage & boots/lower arm ball joint

With the vehicle stopped and the hybrid system off, check for excessive free-play in the steering wheel. Check the linkage for bends or damage. Check the dust boots and ball joints for deterioration, cracks, or damage.

Replace any damaged parts.

#### **Drive shafts and boots**

Check the drive shafts, boots and clamps for cracks, deterioration, or damage. Replace any damaged parts and, if necessary, repack the grease.

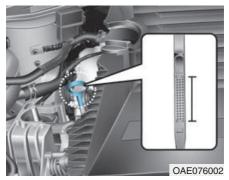
## Air conditioning refrigerant

Check the air conditioning lines and connections for leakage and damage.

#### **ENGINE OIL**

## Checking the engine oil level

- 1. Follow all of the oil manufacturer's precautions.
- Be sure the vehicle is on level ground in P (Park) with the parking brake set and the wheels blocked.
- 3. Turn the engine on and allow the engine to reach normal operating temperature.
- 4. Turn the hybrid system off and wait about five minutes for the oil to return to the oil pan.
- 5. Pull the dipstick out, wipe it clean, and re-insert it fully.

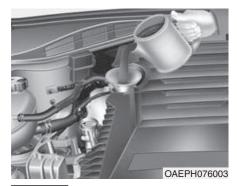


- 6. Pull the dipstick out again and check the level. The level should be between F (Full) and L (Low).
- 7. If it is near or at L, add enough oil to bring the level to F.

#### NOTICE

To prevent damage to your engine:

- Do not overfill with engine oil. Add oil in small quantities and recheck level to ensure engine is not overfilled.
- Do not spill engine oil when adding or changing engine oil. Use a funnel to help prevent oil from being spilled on engine components. Wipe off spilled oil immediately.



#### NOTICE

Use only the specified engine oil (Refer to "Recommended Lubricants and Capacities" in chapter 8).

## Checking the engine oil and filter



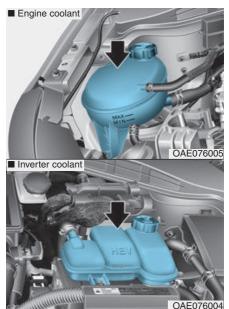
We recommend that the engine oil and filter be changed by an authorized HYUNDAI dealer according to the Maintenance Schedule at the beginning of this chapter.

#### **ENGINE COOLANT/INVERTER COOLANT**

The high-pressure cooling system has a reservoir filled with year-round antifreeze coolant. The reservoir is filled at the factory.

Check the antifreeze protection and coolant level at least once a year, at the beginning of the winter season and before traveling to a colder climate.

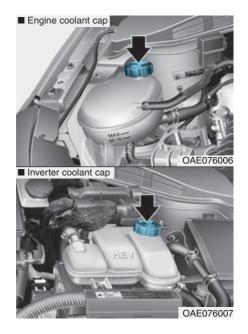
## **Checking the coolant level**



Check the condition and connections of all cooling system hoses and heater hoses. Replace any swollen or deteriorated hoses

The coolant level should be filled between the MAX and the MIN marks on the side of the coolant reservoir when the engine is cool.

If the coolant level is low, add enough distilled (deionized) water to bring the level to the MAX mark, but do not overfill. If frequent additions are required, we recommend that you see an authorized HYUNDAI dealer for a cooling system inspection.



### **A** WARNING



Never remove the engine coolant cap and/or inverter coolant cap or the drain plug while the engine and

radiator are hot. Hot coolant and steam may blow out under pressure, causing serious injury.

Turn the hybrid system off and wait until the engine cools down. Use extreme care when removing the engine coolant cap and/or inverter coolant cap. Wrap a thick towel around it, and turn it counterclockwise slowly to the first stop. Step back while the pressure is released from the cooling system. When you are sure all the pressure has been released, press down on the cap, using a thick towel, and continue turning counterclockwise to remove it.

## **i** Information

The engine coolant and/or inverter coolant level is influenced by the hybrid system temperature. Before checking or refilling the engine coolant and/or inverter coolant, turn the hybrid vehicle off.

### **A** WARNING



The electric motor for the cooling fan may continue to operate or start up when the engine is not running

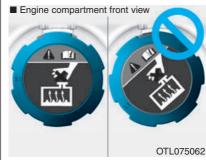
and can cause serious injury.

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 engine coolant temperature, refrigerant pressure and vehicle speed. As the engine coolant temperature decreases, the electric motor will automatically shut off. This is a normal condition. If your vehicle is equipped with GDI, the electric motor for the cooling fan may begin to operate at any time and continue to operate until you disconnect the negative battery cable.

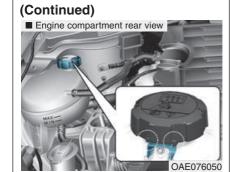
### **▲** WARNING

Make sure the coolant cap is properly closed after refilling coolant. Otherwise the engine could be overheated while driving.



Check if the coolant cap label is straight in front.

(Continued)



2. Make sure that the tiny protrusions inside the coolant cap is securely interlocked.

#### Recommended coolant

- When adding coolant, use only deionized water, distilled water or soft water for your vehicle and never mix hard water in the coolant filled at the factory.
- An incorrect coolant mixture can result in severe malfunction or engine/hybrid system damage.
- The engine in your vehicle has aluminum engine parts and must be protected by an phosphate-based ethylene glycol coolant to prevent corrosion and freezing.
- Do not use alcohol or methanol coolant or mix them with the specified coolant.
- Do not use a solution that contains more than 60% antifreeze or less than 35% antifreeze, which would reduce the effectiveness of the solution.

For mixing percentage, refer to the following table:

| Ambient<br>Temperature | Mixture Percentage (volume) |       |  |  |  |
|------------------------|-----------------------------|-------|--|--|--|
| remperature            | Antifreeze                  | Water |  |  |  |
| -15°C (5°F)            | 35                          | 65    |  |  |  |
| -25°C (-13°F)          | 40                          | 60    |  |  |  |
| -35°C (-31°F)          | 50                          | 50    |  |  |  |
| -45°C (-49°F)          | 60                          | 40    |  |  |  |

## **i** Information

If in doubt about the mix ratio, a 50% water and 50% antifreeze mix is the easiest to mix together as it will be the same quantity of each. It is suitable to use for most temperature ranges of -35°C (-31°F) and higher.

## **Changing coolant**

We recommend that coolant be changed by an authorized HYUNDAI dealer according to the Maintenance Schedule at the beginning of this chapter.

#### **A** WARNING

Do not use engine coolant or antifreeze in the washer fluid reservoir.

Engine coolant can severely obscure visibility when sprayed on the windshield and may cause loss of vehicle control resulting in an accident.

Engine coolant may also cause damage to paint and body trim.

#### NOTICE

To prevent damage to engine parts, put a thick towel around the engine coolant cap and/or inverter coolant cap before refilling the coolant to prevent the coolant from overflowing into engine parts, such as the alternator.

#### HYBRID STARTER & GENERATOR (HSG) BELT

## Checking the hybrid starter & generator (HSG) belt

We recommend that you have the hybrid starter & generator (HSG) belt inspected or replaced according to the Maintenance Schedule in this chapter by an authorized HYUNDAI dealer.

## **A** CAUTION

When the HSG belt is worn out or damaged, replace the belt.

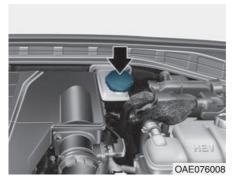
Otherwise, it may cause engine overheating or battery discharge.

## **A WARNING**

- Turn the vehicle off while you inspect the engine or hybrid starter & generator(HSG) belt. Otherwise it may result in serious injury.
- Keep hands, clothing etc. away from the hybrid starter & generator (HSG) belt.

#### **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 the specified brake fluid to the MAX level. The level will fall with accumulated mileage. This is a normal condition associated with the wear of the brake linings. If the fluid level is excessively low, we recommend that the brake system be checked by an authorized HYUNDAI dealer.

## **A WARNING**

If the brake system requires frequent additions of fluid this could indicate a leak in the brake system. We recommend that the vehicle be inspected by an authorized HYUNDAI dealer.

#### **A** WARNING

Do not allow brake fluid to come in contact with your eyes. If brake fluid comes in contact with your eyes, flush your eyes with clean water for at least 15 minutes and get immediate medical attention.

#### NOTICE

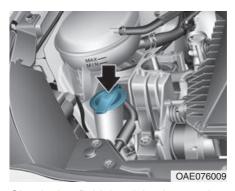
- Do not allow brake fluid to contact the vehicle's body paint, as paint damage will result.
- Brake fluid, which has been exposed to open air for an extended time should NEVER be used as its quality cannot be guaranteed. It should be disposed of properly.
- Do not use the wrong kind of brake fluid. A few drops of mineral based oil, such as engine oil, in your brake system can damage brake system parts.

## Information

Use only the specified brake fluid Refer to "Recommended Lubricants and Capacities" in chapter 8.

#### **WASHER FLUID**

## **Checking the washer fluid** level



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.

## **A** WARNING

To prevent serious injury or death, take the following safety precautions when using washer fluid:

- Do not use engine coolant or antifreeze in the washer fluid reservoir. Engine 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

# PARKING BRAKE Checking the parking brake

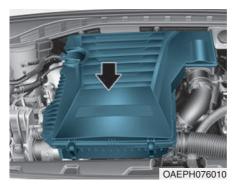
Foot type (if equipped)



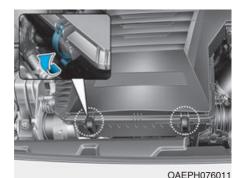
Check whether the stroke is within specification when the parking brake pedal is depressed with 20 kg (44 lb, 196 N) of force. Also, the parking brake alone should securely hold the vehicle on a fairly steep grade. If the stroke is more or less than specified, have the parking brake adjusted by an authorized HYUNDAI dealer.

Stroke: 4~5 notch

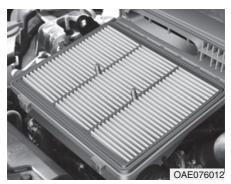
# **AIR CLEANER**Filter replacement



The air cleaner filter can be cleaned for inspection using compressed air. Do not attempt to wash or to rinse it, as water will damage the filter. If soiled, the air cleaner filter must be replaced.



1. Loosen the air cleaner cover attaching clips and open the cover.



- 2. Wipe the inside of the air cleaner.
- 3. Replace the air cleaner filter.
- 4. Lock the cover with the cover attaching clips.
- 5. Check that the cover is firmly installed.

## *i* Information

If the vehicle is operated in extremely dusty or sandy areas, replace the element more often than the usual recommended intervals (Refer to "Maintenance Under Severe Usage Conditions" in this chapter).

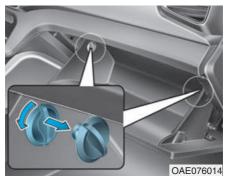
#### NOTICE

- Do not drive with the air cleaner filter removed. This will result in excessive engine wear.
- When removing the air cleaner filter, be careful that dust or dirt does not enter the air intake, or damage may result.
- Use HYUNDAI genuine parts.
   Use of non-genuine parts could damage the air flow sensor.

#### **CLIMATE CONTROL AIR FILTER**

## **Filter inspection**

The climate control air filter should be replaced according to the Maintenance Schedule. If the vehicle is operated in severely air-polluted cities or on dusty rough roads for a long period, it should be inspected more frequently and replaced earlier. When you replace the climate control air filter, replace it performing the following procedure, and be careful to avoid damaging other components.



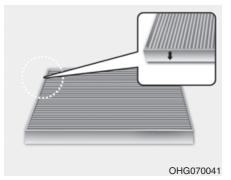
1. With the glove box open, remove the stoppers on both sides.



2. Remove the support rod (1).



- 3. Press and hold the lock (1) on both sides of the cover.
- 4. Pull out (2) the cover.



- 5. Replace the climate control air filter.
- 6. Reassemble in the reverse order of disassembly.

### NOTICE

Install a new climate control air filter in the correct direction with the arrow symbol (\psi) 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 clean cloth dampened with washer fluid.

### NOTICE

To prevent damage to the wiper blades, arms or other components, do not:

- Use gasoline, kerosene, paint thinner, or other solvents on or near them.
- Attempt to move the wipers manually.
- Use non-specified wiper blades.

# i Information

Commercial hot waxes applied by automatic car washes have been known to make the windshield difficult to clean.

# Information

Wiper blades are consumable items. 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.

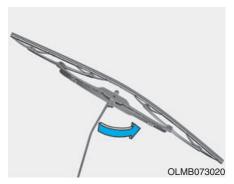
# NOTICE

To prevent damage to the wiper arms or other components, do not attempt to move the wipers manually.

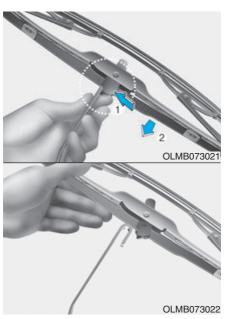
### NOTICE

The use of a non-specified wiper blade could result in wiper malfunction and failure.

Type A



1. Raise the wiper arm and turn the wiper blade assembly to expose the plastic locking clip.

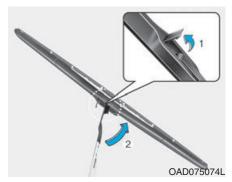


- 2. Press the clip and slide the blade assembly downward.
- 3. Lift it off the arm.
- 4. Install the blade assembly in the reverse order of removal.

Type B



1. Raise the wiper arm.



2. Lift up the wiper blade clip (1). Then lift up the wiper blade (2).



3. While pushing the lock (3), pull down the wiper blade (4).



- 4. Remove the wiper blade from the wiper arm (5).
- 5. Install a new wiper blade assembly in the reverse order of removal.
- 6. Return the wiper arm on the windshield.

# BATTERY (12 VOLT, PLUG-IN HYBRID VEHICLE)

# **A** 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.

(Continued)

# (Continued)



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.

(Continued)

### (Continued)

- 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 engine running or when the Engine Start/Stop button is in the ON position.

### NOTICE

- 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.

### For best battery service



- 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 acid from the battery immediately with a solution of water and baking soda.

i Information - For batteries marked with UPPER and LOWER



If your vehicle is equipped with a battery marked with LOWER (MIN) and UPPER (MAX) on the side, you should check the electrolyte level.

The electrolyte level should be between LOWER (MIN) and UPPER (MAX). When the electrolyte level is low, add distilled (or de-mineralized) water. (Never add sulfuric acids or other electrolyte).

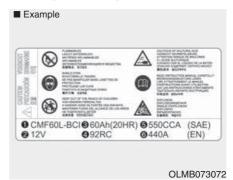
(continued)

### (continued)

Be careful not to spill distilled (or demineralized) water over the battery surface or other adjacent components. Also, do not overfill the battery cells.

If not, it may corrode the battery or other components. Finally, securely close the cell cap. However, we recommend you to contact an authorized HYUNDAI dealer for better battery service.

### **Battery capacity label**



- \* The actual battery label in the vehicle may differ from the illustration.
- 1. 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.

- If the battery becomes discharged over a short time (because, for example, the headlamps or interior lights were left on while the vehicle was not in use), recharge it by slow charging (trickle) for 10 hours.
- If the battery gradually discharges because of high electrical load while the vehicle is being used, recharge it at 20-30A for two hours.

### **A** 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 Engine 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 battery must be removed from the vehicle and placed in a well ventilated area.

(Continued)

### (Continued)

- Watch the battery during charging, and stop or reduce the charging rate if the battery cells begin boiling violently.
- 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 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 6 for more information on jump starting procedures.

# 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.

### **Reset features**

The following items may need to be reset after the battery has been discharged or the battery has been disconnected.

See chapter 3 or 4 for:

- Power Windows
- Trip Computer
- Climate Control System
- Clock
- Audio System
- Sunroof
- Driver Position Memory System

### TIRES AND WHEELS

# **A** 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.

(Continued)

### (Continued)

- Replace tires that are worn, show uneven wear, or are damaged. Worn tires can cause loss of braking effectiveness, steering control, or traction.
- ALWAYS replace tires with the same size as each tire that was originally supplied with this vehicle. Using tires and wheels other than the recommended sizes could cause unusual handling characteristics, poor vehicle control, or negatively affect your vehicle's Anti-Lock Brake System (ABS) resulting in a serious accident.

### Tire care

For proper maintenance, safety, and maximum fuel economy, you must always maintain recommended tire inflation pressures and stay within the load limits and weight distribution recommended for your vehicle.



All specifications (sizes and pressures) can be found on a label attached to the driver's side center pillar.

# Recommended cold tire inflation pressures

All tire pressures (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 driven less than 1.6 km (one mile).

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 "Tire and Wheels" in chapter 8.

### **▲** WARNING

Recommended pressures must be maintained for the best ride, vehicle handling, and minimum tire wear.

Over-inflation or under-inflation can reduce tire life, adversely affect vehicle handling, and lead to sudden tire failure that could result in loss of vehicle control resulting in an accident. Severe under-inflation can lead to severe heat build-up, causing blowouts, tread separation and other tire failures that can result in the loss of vehicle control resulting in an accident. This risk is much higher on hot days and when driving for long periods at high speeds.

# **A** CAUTION

- Under-inflation results in excessive wear, poor handling and reduced fuel economy. Wheel deformation is also possible. Keep your tire pressures at the proper levels. If a tire frequently needs refilling, we recommend it be 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 under-inflated.

Remove the valve cap from the tire valve stem. Press the tire gauge firmly onto the valve to get a pressure measurement. If the cold tire inflation pressure matches the recommended pressure on the tire and loading information label, no further adjustment is necessary. If the pressure is low, add air until you reach the recommended pressure. Make sure to put the valve caps back on the valve stems. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

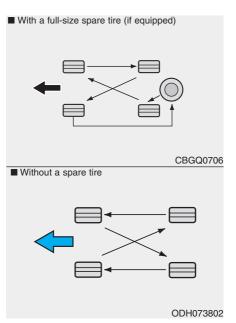
If you overfill the tire, release air by pushing on the metal stem in the center of the tire valve. Recheck the tire pressure with the tire gauge. Be sure to put the valve caps back on the valve stems. Without the valve cap, dirt or moisture could get into the valve core and cause air leakage. If a valve cap is missing, install a new one as soon as possible.

#### Tire rotation

To equalize tread wear, HYUNDAI recommends that the tires be rotated every 12,000 km (7,500 miles) 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" face the outside. If the side marked "inside" is installed on the outside, it will have a negative effect on vehicle performance.

### **A** 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



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.

### **A** 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.

(Continued)

### (Continued)

- 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.
- 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.

# Compact spare tire replacement (if equipped)

A compact spare tire has a shorter tread life than a regular size tire. Replace it when you can see the tread wear indicator bars on the tire. The replacement compact spare tire should be the same size and design tire as the one provided with your new vehicle and should be mounted on the same compact spare tire wheel. The compact spare tire is not designed to be mounted on a regular size wheel, and the compact spare tire wheel is not designed for mounting a regular size tire.

# **A** WARNING

The original tire should be repaired or replaced as soon as possible to avoid failure of the spare and loss of vehicle control resulting in an accident. The compact spare tire is for emergency use only. Do not operate your vehicle over 80 km/h (50 mph) when using the compact spare tire.

# 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.)

#### 195/65R15 91H

- 195 Tire width in millimeters.
- 65 Aspect ratio. The tire's section height as a percentage of its width.
- R Tire construction code (Radial).
- 15 Rim diameter in inches.
- 91 Load Index, a numerical code associated with the maximum load the tire can carry.
- H Speed Rating Symbol. See the speed rating chart in this section for additional information.

### Wheel size designation

Wheels are also marked with important information that you need if you ever have to replace one. The following explains what the letters and numbers in the wheel size designation mean.

Example wheel size designation:

### 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<br>Rating<br>Symbol | Maximum Speed      |
|---------------------------|--------------------|
| S                         | 180 km/h (112 mph) |
| Т                         | 190 km/h (118 mph) |
| Н                         | 210 km/h (130 mph) |
| V                         | 240 km/h (149 mph) |
| W                         | 270 km/h (168 mph) |
| Υ                         | 300 km/h (186 mph) |

# 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 1517 represents that the tire was produced in the 15th week of 2017.

# 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:

TREADWEAR 200 TRACTION AA TEMPERATURE A

### Tread wear

The tread wear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one-and-a-half times (1½) as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

These grades are molded on the sidewalls of passenger vehicle tires. The tires available as standard or optional equipment on your vehicle may vary 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.

### **A** WARNING

The traction grade assigned to this tire is based on straightahead 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.

### Low aspect ratio tires

The aspect ratio is lower than 50 on low aspect ratio tires.

Because low aspect ratio tires are optimized for handling and braking, their sidewall is a little stiffer than a standard tire. Also low aspect ratio tires tend to be wider and consequently have a greater contact patch with the road surface. In some instances they may generate more road noise compared with standard tires.

# **A** 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.

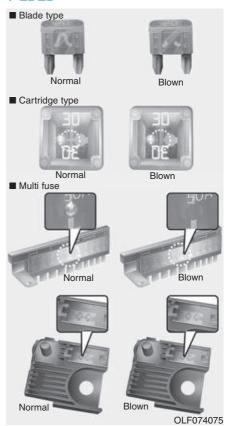
- When driving on a rough road or driving off a road, be careful not to damage the tires and wheels. After driving, inspect the tires and wheels.
- When passing over a pothole, speed bump, manhole, or curb stone, drive the vehicle slowly so as not to damage the tires and wheels.
- When there is an impact on a tire, inspect the tire condition.
   Or, contact an authorized HYUNDAI dealer.

(Continued)

### (Continued)

- Inspect the tire condition and pressure every 3,000 km (1,800 miles) 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 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 engine 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 engine and all switches off, and then disconnect the negative battery cable. Always replace a blown fuse with one of the same rating.

If the replacement fuse blows, this indicates an electrical problem. Avoid using the system involved and immediately consult an authorized HYUNDAI dealer.

# Information

Three kinds of fuses are used: blade type for lower amperage rating, cartridge type, and multi fuse for higher amperage ratings.

# **⚠** WARNING

NEVER replace a fuse with anything but another fuse of the same rating.

- A higher capacity fuse could cause damage and possibly cause a fire.
- Do not install a wire or aluminum foil instead of the proper fuse - even as a temporary repair. It may cause extensive wiring damage and possibly a fire.

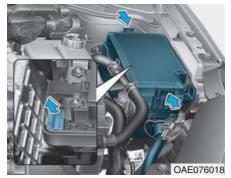
### **A** CAUTION

Do not use a screwdriver or any other metal object to remove fuses because it may cause a short circuit and damage the system.

# Instrument panel fuse replacement



- 1. Turn the vehicle off.
- 2. Turn all other switches off.
- 3. Open the fuse panel cover.
- Refer to the label on the inside of the fuse panel cover to locate the suspected fuse location.



- Pull the suspected fuse straight out. Use the removal tool provided in the engine 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 engine 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, we recommend that you 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 headlamps or other electrical components do not work and the fuses are undamaged, check the fuse panel in the engine 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

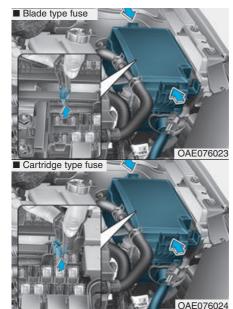


If the fuse switch is OFF, "Turn on FUSE SWITCH" message will appear.

### 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.

# Engine compartment panel fuse replacement



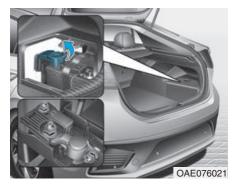
- 1. Turn the vehicle off.
- 2. Turn all other switches off.
- 3. Remove the fuse panel cover by pressing the tap and pulling up.

- 4. Check the removed fuse; replace it if it is blown. To remove or insert the fuse, use the fuse puller in the engine 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 engine 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.

## Main fuse (Plug-in hybrid vehicle)



The electronic system may not function correctly even when the fuses located in the engine compartment and instrument panel are not disconnected. In such case, the cause of the problem may be disconnection of the main fuse (BFT type), which is located inside the positive battery terminal (+) cap. Since the main fuse is designed more intricately than other parts, we recommend you visit the nearest HYUNDAI dealer.

# Information

After inspection always securely install the battery cap. 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.

# i Information

If the multi fuse is blown, consult an authorized HYUNDAI dealer.

### **Fuse/relay panel description**

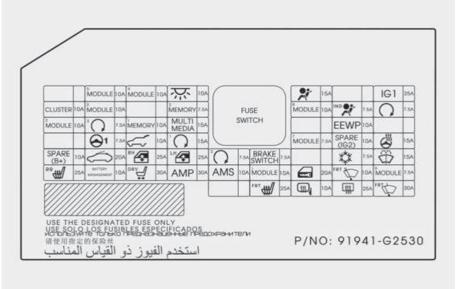
### Instrument panel fuse panel



Inside the fuse/relay box cover, you can find the fuse/relay label describing fuse/relay names and ratings.

# Information

Not all fuse panel descriptions in this manual may be applicable to your vehicle; the information is accurate at the time of printing. When you inspect the fuse box on your vehicle, refer to the fuse box label.



OAE076053L

| Fuse Name         | Symbol      | Fuse Rating | Circuit Protected  |
|-------------------|-------------|-------------|--|
| Module 5          | 5<br>MODULE | 10A         | Electro Chromic Mirror, A/V & Navigation Head Unit, Audio, Driver IMS Module, A/T Shift Lever Indicator, A/C Control Module, Rear Seat Warmer Module, Console Switch LH/RH, Head Lamp Leveling Device Actuator LH/RH, Vess Unit, Front Air Ventilation Seat Control Module, Front Seat Warmer Control Module |
| Module 4          | 4<br>MODULE | 10A         | Lane Departure Warning Unit, Crash Pad Switch, AEB Unit,<br>Blind Spot Detection Radar LH/RH   |
| Interior Lamp     | 茶           | 10A         | Front Vanity Lamp LH/RH, Room Lamp, Overhead Console Lamp, Ignition Key ILL. & Door Warning Switch, Luggage Lamp   |
| Air bag           | *           | 15A         | SRS Control Module   |
| Ignition 1        | IG1         | 25A         | PCB Block  |
| Cluster           | CLUSTER     | 10A         | Instrument Cluster   |
| Module 3          | 3<br>MODULE | 10A         | BCM, DCT Shift Lever, Stop Lamp Switch, Driver Door Module, Passenger Door Module  |
| Memory 2          | 2<br>MEMORY | 7.5A        | Active Air Flap LH/RH  |
| Module 8          | 8<br>MODULE | 10A         | Active Air Flap LH/RH, Electric Water Pump (HEV), VPD Sensor, BMS Control Module, E/R Junction Block   |
| Air bag Indicator | IND         | 7.5A        | A/C Control Module, Instrument Cluster   |
| Start             | C           | 7.5A        | Burglar Alarm Relay, Transaxle Range Switch  |

| Fuse Name                    | Symbol            | Fuse Rating | Circuit Protected  |
|------------------------------|-------------------|-------------|--|
| Module 2                     | 2<br>MODULE       | 10A         | E/R Junction Block, Wireless Charger Unit, BCM, USB Charging Connector, Smart Key Control Module, Audio, A/V & Navigation Head Unit, Power Outside Mirror Switch, AMP  |
| Button Start 3               | <sup>3</sup> ()   | 7.5A        | Immobilizer Module, Smart Key Control Module   |
| Memory 1                     | 1<br>MEMORY       | 10A         | Wireless Charger Unit, Instrument Cluster, Driver Ims Module, Rain Sensor, BCM, A/C Control Module, Auto Light & Photo Sensor, Driver Door Module, Passenger Door Module, ICM Relay Box (Outside Mirror Folding/Unfolding Relay) |
| Multi Media                  | MULTI<br>MEDIA    | 10A         | Audio, A/V & Navigation Head Unit  |
| Electric Water<br>Pump       | EWP               | 10A         | Electric Water Pump (HEV)  |
| Electric<br>Power Steering 1 | ⊕1                | 7.5A        | EPS Unit   |
| Tailgate                     | V                 | 10A         | Tail Gate Relay, Fuel Filler Switch, Fuel Filler Actuator  |
| Button Start 1               | 10                | 15A         | Smart Key Control Module   |
| Module 7                     | 7<br>MODULE       | 7.5A        | Front Seat Warmer Control Module, Front Air Ventilation Seat Control Module, Rear Seat Warmer Module   |
| Heated Steering              |                   | 15A         | ВСМ  |
| Sunroof                      | $\Leftrightarrow$ | 20A         | Sunroof Motor  |
| Power Window<br>Right-hand   | RH                | 25A         | Power Window (RH) Relay, Power Window Main Switch, Passenger Power Window Switch (LHD), Rear Power Window Switch (RH), Driver Safety Power Window Module (LHD), Passenger Power Window Switch (RHD)                              |

| Fuse Name                       | Symbol                     | Fuse Rating | Circuit Protected   |
|---------------------------------|----------------------------|-------------|---|
| Power Window<br>Left-hand       | LH 🚱                       | 25A         | Power Window (LH) Relay, Power Window Main Switch, Passenger Power Window Switch (RHD), Rear Power Window Switch (LH), Driver Safety Power Window Module (RHD), Passenger Power Window Switch (LHD) |
| Button Start 2                  | <sup>2</sup> ()            | 7.5A        | Immobilizer Module, Smart Key Control Module, Start/Stop Button Switch  |
| Brake Switch                    | BRAKE<br>SWITCH            | 7.5A        | Stop Lamp Switch, Smart Key Control Module  |
| Air conditioner                 | *                          | 7.5A        | Ionizer, A/C Control Module, Electronic A/C Compressor, E/R Junction Block  |
| Washer                          | ⇔                          | 15A         | Multifunction Switch  |
| Seat Heater Rear                | RR W                       | 25A         | Rear Seat Warmer Module   |
| Battery<br>Management<br>System | BATTERY<br>MANAG-<br>EMENT | 10A         | BMS Control Module  |
| Power Seat Driver               | DRV                        | 30A         | Driver Seat Manual Switch   |
| AMP                             | АМР                        | 30A         | AMP   |
| AMS                             | AMS                        | 30A         | Battery Sensor  |
| Module 1                        | 1<br>MODULE                | 10A         | Driver Power Outside Mirror, Passenger Power Outside Mirror   |
| Door Lock                       |                            | 20A         | Door Lock/Unlock Relay, ICM Relay Box (Dead Lock Relay)   |

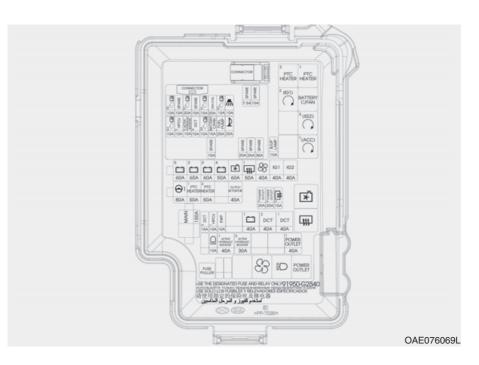
| Fuse Name         | Symbol      | Fuse Rating | Circuit Protected   |
|-------------------|-------------|-------------|---|
| Wiper Front 2     | FRT2        | 10A         | Wiper Motor, PCB Block (Front Wiper (Low) Relay)                                |
| Module 6          | 6<br>MODULE | 7.5A        | BCM, Smart Key Control Module   |
| Seat Heater Front | FRT         | 25A         | Front Seat Warmer Control Module, Front Air Ventilation Seat Control Module     |
| Heated Mirror     | CIII)       | 10A         | Driver Power Outside Mirror, Passenger Power Outside Mirror, A/C Control Module |
| Rear Heated       | [#]         | 25A         | Rear Defogger (+) (Upper)   |
| Wiper Front 1     | FRT1        | 30A         | Wiper Motor, PCB Block (Front Wiper (Low) Relay)                                |



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.



| Туре        | Symbol          | Fuse Rating | Circuit Protected   |
|-------------|-----------------|-------------|---|
|             | MAIN            | 150A        | Low Voltage DC-DC Converter, E/R Junction Block                         |
|             | 5 — +           | 60A         | PCB Block   |
|             | 2 - +           | 60A         | IGPM  |
|             | 3 — +           | 60A         | IGPM  |
|             | 4 = +           | 50A         | IGPM  |
| Multi Fuse  | <b>E</b>        | 60A         | Engine Room Junction Block  |
| Multi 1 use | 1 (##)          | 50A         | Engine Room Junction Block  |
|             | SS              | 40A         | Engine Room Junction Block  |
|             | IG1             | 40A         | Without Smart Key : Ignition Switch With Smart Key : E/R Junction Block |
|             | IG2             | 40A         | Without Smart Key : Ignition Switch With Smart Key : E/R Junction Block |
|             | <b>⊕</b> ¹      | 80A         | EPS Unit  |
|             | 1 PTC<br>HEATER | 50A         | Engine Room Junction Block  |

| Туре       | Symbol                           | Fuse Rating | Circuit Protected   |
|------------|----------------------------------|-------------|---|
| Multi Fuse | <sup>2</sup> PTC<br>HEATER       | 50A         | Engine Room Junction Block                                      |
| Walti Tage | CLUTCH<br>ACTUATOR               | 40A         | Clutch Actuator   |
|            | <sup>3</sup> DCT                 | 15A         | тсм   |
|            | 1<br>HPCU                        | 10A         | HPCU  |
|            | EWP                              | 10A         | Electric Water Pump (HEV)                                       |
|            | 1 — +                            | 40A         | IGPM  |
|            | <sup>2</sup> DCT                 | 40A         | тсм   |
| Fuse       | 1 DCT                            | 40A         | тсм   |
|            |                                  | 10A         | Engine Room Junction Block                                      |
|            | 1 ACTIVE<br>HYDRAULIC<br>BOSSTER | 40A         | Multipurpose Check Connector, IBAU                              |
|            | 2 ACTIVE<br>HYDRAULIC<br>BOSSTER | 30A         | Multipurpose Check Connector, IBAU                              |
|            | 1 POWER<br>OUTLET                | 40A         | Engine Room Junction Block                                      |
|            | B/UP<br>LAMP                     | 10A         | Audio, Rear Combination Lamp (IN) LH/RH, Electro Chromic Mirror |

| Туре | Symbol                           | Fuse Rating | Circuit Protected  |
|------|----------------------------------|-------------|--|
|      | <sup>3</sup> POWER<br>OUTLET     | 20A         | Cigarette Lighter  |
|      | <sup>2</sup> POWER<br>OUTLET     | 20A         | Power Outlet   |
|      | 2 1111                           | 15A         | IGPM, Rear Defogger (+) (Lower)  |
|      | s2<br>(                          | 10A         | Engine Room Junction Block, Purge Control Solenoid Valve, Mass Air Flow Sensor |
|      |                                  | 20A         | ECM  |
|      | sı<br>C)                         | 15A         | Oxygen Sensor (Up), Oxygen Sensor (Down)                                       |
| Fuse | IGN<br>COIL                      | 20A         | Ignition Coil #1~#4  |
|      |                                  | 15A         | ECM  |
|      | **                               | 10A         | Burglar Alarm Horn Relay   |
|      |                                  | 10A         | ECM  |
|      | 2<br>HPCU                        | 15A         | HPCU, Clutch Actuator (HEV)  |
|      | 3 ACTIVE<br>HYDRAULIC<br>BOSSTER | 10A         | Multipurpose Check Connector, IBAU   |
|      | <sup>4</sup> DCT                 | 15A         | DCT Shift Lever, TCM, Transaxle Range Switch                                   |

| Туре  | Symbol           | Fuse Rating | Circuit Protected   |
|-------|------------------|-------------|---|
|       |                  |             | Fuel Pump Relay, Camshaft Position Sensor #1 (Intake), Camshaft Position Sensor #2 (Exhaust), Oil Control Valve #1 (Intake), Oil Control Valve #2 (Exhaust) |
| Fuse  | BATTERY<br>C/FAN | 15A         | Engine Room Junction Block  |
| 1 436 | FUEL<br>PUMP     | 20A         | Fuel Pump Relay   |
|       | D                | 20A         | Horn Relay  |

### LIGHT BULBS

Consult an authorized HYUNDAI dealer to replace most vehicle light bulbs. It is difficult to replace vehicle light bulbs because other parts of the vehicle must be removed before you can get to the bulb. This is especially true for removing the headlamp assembly to get to the bulb(s).

Removing/installing the headlamp assembly can result in damage to the vehicle.

### **A** WARNING

Prior to working on a light, firmly apply the parking brake, ensure that the ignition switch is in the LOCK/OFF position and turn off the lights to avoid sudden movement of the vehicle and burning your fingers or receiving an electric shock.

### 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 electric wiring system.

# **i** Information

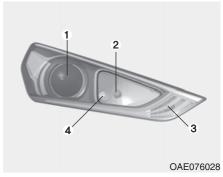
After heavy driving rain or washing, the lamps could appear frosty. This condition is caused by the temperature difference between the lamp inside and the outside temperature. This is similar to the condensation on your windows inside your vehicle when raining and doesn't indicate a problem with your vehicle. If the water leaks into the light bulb circuitry, have your vehicle checked by an authorized HYUNDAI dealer.

# 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, we recommend the system be 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 headlamp switch may turn on when the headlamp switch is turned on. This may be caused by network failure or vehicle electrical control system malfunction. If this occurs, we recommend the system be checked by an authorized HYUNDAI dealer.

### Headlamp, position lamp, turn signal lamp bulb replacement

### Type A



- (1) Headlamp (Low)
- (2) Headlamp (High)
- (3) Turn signal lamp
- (4) Position lamp

# **A** WARNING



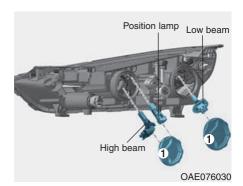
- Handle halogen bulbs with care. Halogen bulbs contain pressurized gas that will produce flying pieces of glass that could cause injuries if broken.
- Wear eye protection when changing a bulb. Allow the bulb to cool down before handling it.

- 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 headlamp.
- If a bulb becomes damaged or cracked, replace it immediately and carefully dispose of it.

# *i* Information

**Traffic Change (For Europe)** 

The low beam light distribution is asymmetric. If you go abroad to a country with opposite traffic direction, this asymmetric part will dazzle oncoming car driver. To prevent dazzle, ECE regulation demand several technical solutions (ex. automatic change system, adhesive sheet, down aiming). This headlamps are designed not to dazzle opposite drivers. So, you need not change your headlamps in a country with opposite traffic direction.

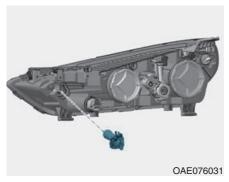


### Headlamp and position lamp

- 1. Open the hood.
- 2. Disconnect the negative battery cable.
- 3. Remove the bulb cover (1) by turning it counterclockwise.
- Disconnect the bulb socket-connector. (for low beam and high beam)
- Remove the bulb from the headlamp assembly.
- 6. Install a new bulb.
- 7. Connect the bulb socket-connector. (for low beam and high beam)
- 8. Install the bulb cover (1) by turning it clockwise.

# i Information

The headlamp aiming should be adjusted after an accident or after the headlamp assembly is reinstalled at an authorized HYUNDAI dealer.



Turn signal lamp

- 1. Open the hood.
- 2. Disconnect the negative battery cable.
- 3.Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- 4.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.

- 5.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.
- 7. Push the socket into the assembly and turn the socket clockwise.

Type B



- (1) Headlamp (Low/High)
- (2) Turn signal lamp
- (3) Position lamp

Headlamp and position lamp

If the light bulb does not operate, we recommend that you have the vehicle checked by an authorized HYUNDAI dealer.

#### **A** WARNING

#### **HID** headlamp

Do not attempt to replace or inspect the low beam (XENON bulb) due to electric shock danger. If the low beam (XENON bulb) is not working, have your vehicle checked by an authorized HYUNDAI Dealer.

## *i* Information

If your vehicle is equipped with High Intensity Discharge (HID) headlamps, these headlamps contain mercury. So if you need to have your vehicle disposed, you should remove the HID Headlamps before disposal. The removed HID headlamps should be recycled, re-used or disposed as hazardous waste.

## i Information

HID lamps have superior performance vs. halogen bulbs.

HID lamps are estimated by the manufacturer to last twice as long or longer than halogen bulbs depending on their frequency of use. They will probably require replacement at some point in the life of the vehicle. Cycling the headlamps on and off more than typical use will shorten HID lamps life. HID lamps do not fail in the same manner as halogen incandescent lamps. If a headlamp goes out after a period of operation but will immediately relight when the headlamp switch is cycled it is likely the HID lamp needs to be replaced. HID lighting components are more complex than conventional halogen bulbs thus have higher replacement cost.

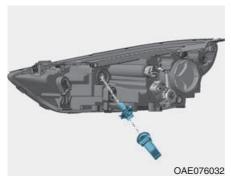
## Information

The headlamp aiming should be adjusted after an accident or after the headlamp assembly is reinstalled at an authorized HYUNDAI dealer.

## Information

**Traffic Change (For Europe)** 

The low beam light distribution is asymmetric. If you go abroad to a country with opposite traffic direction, this asymmetric part will dazzle oncoming car driver. To prevent dazzle, ECE regulation demand several technical solutions (ex. automatic change system, adhesive sheet, down aiming). This headlamps are designed not to dazzle opposite drivers. So, you need not change your headlamps in a country with opposite traffic direction.



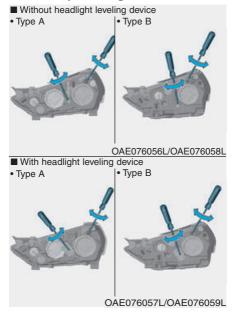
Turn signal lamp
1. Open the hood.

- 2. Disconnect the negative battery cable.
- 3.Remove the socket from the assembly by turning the socket counterclockwise until the tabs on the socket align with the slots on the assembly.
- 4.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.

- 5.Insert a new bulb by inserting it into the socket and rotating it until it locks into place.
- 6.Install the socket into the assembly by aligning the tabs on the socket with the slots in the assembly.
- 7. Push the socket into the assembly and turn the socket clockwise.

## **Headlamp aiming (For Europe)**

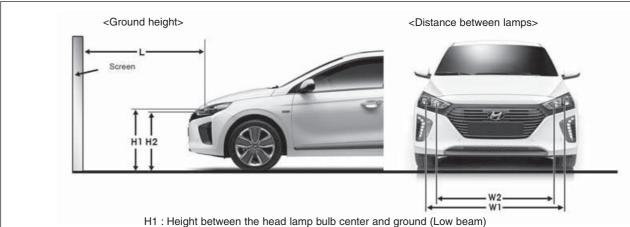
#### Headlamp aiming



- 1. Inflate the tires to the specified pressure and remove any loads from the vehicle except the driver, spare tire, and tools.
- 2. The vehicle should be placed on a flat floor.
- Draw vertical lines (Vertical lines passing through respective head lamp centers) and a horizontal line (Horizontal line passing through center of head lamps) on the screen.
- With the headlamp and battery in normal condition, aim the headlamps so the brightest portion falls on the horizontal and vertical lines.
- To aim the low beam left or right, turn the driver clockwise or counterclockwise. To aim the low beam up or down, turn the driver clockwise or counterclockwise.

To aim the high beam up or down, turn the driver clockwise or counterclockwise.

## Aiming point



H1: Height between the head lamp bulb center and ground (Low beam)
H2: Height between the head lamp bulb center and ground (High beam)

W1 : Distance between the two head lamp bulbs centers (Low beam)

W2: Distance between the two head lamp bulbs centers (High beam)

OAE076068L

Unit: mm (in)

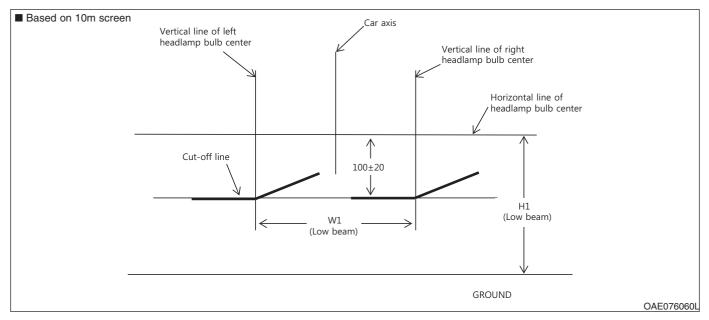
#### ■ Type A

| Vehicle condition | H1 H2          |                | W1               | W2               |
|-------------------|----------------|----------------|------------------|------------------|
| Without driver    | 714<br>(28.11) | 688<br>(27.08) | 1,463<br>(57.59) | 1,238<br>(48.74) |
| With driver       | 707            |                | 1,463<br>(57.59) | 1,238<br>(48.74) |

#### ■ Type B

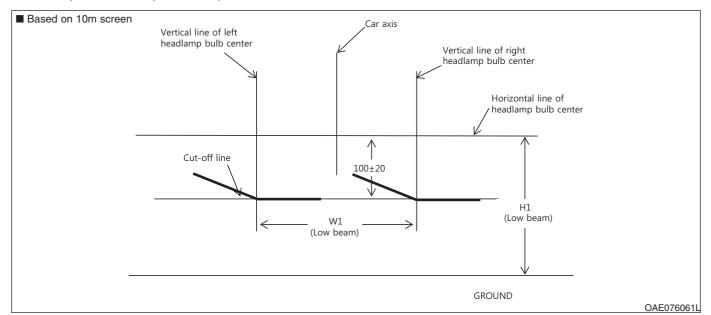
| Vehicle condition          | H1      | H2      | W1      | W2      |  |
|----------------------------|---------|---------|---------|---------|--|
| Without driver 709 (27.91) |         | 709     | 1,454   | 1,454   |  |
|                            |         | (27.91) | (57.24) | (57.24) |  |
| With driver                | 702     | 702     | 1,454   | 1,454   |  |
|                            | (27.63) | (27.63) | (57.24) | (57.24) |  |

### Headlamp low beam (LHD side)



- 1. Turn the low beam on without driver aboard.
- 2. The cut-off line should be projected in the cut-off line shown in the picture.
- 3. When aiming the low beam, vertical aiming should be adjusted after adjusting the horizontal aiming.
- 4. If headlamp leveling device is equipped, adjust the head lamp leveling device switch to "0".

### Headlamp low beam (RHD side)



- 1. Turn the low beam on without driver aboard.
- 2. The cut-off line should be projected in the cut-off line shown in the picture.
- 3. When aiming the low beam, vertical aiming should be adjusted after adjusting the horizontal aiming.
- 4. If headlamp leveling device is equipped, adjust the head lamp leveling device switch to "0".

## **Daytime running lamp**



If the LED lamp does not operate, we recommend that you have the vehicle checked by an authorized HYUNDAI dealer.

## Side repeater lamp replacement

### Type A



- 1. Remove the lamp assembly from the vehicle by prying the lens and pulling the assembly out.
- 2. Disconnect the bulb electrical connector.
- Separate the socket and the lens parts by turning the socket counterclockwise until the tabs on the socket align with the slots on the lens part.
- 4. Remove the bulb by pulling it straight out.

- 5. Insert a new bulb into the socket.
- 6. Reassemble the socket and the lens part.
- 7. Connect the bulb electrical connector.
- 8. Reinstall the lamp assembly to the body of the vehicle.

## Type B



If the LED lamp does not operate, we recommend that you have the vehicle checked by an authorized HYUNDAI dealer.

## Rear combination lamp bulb replacement

Type A

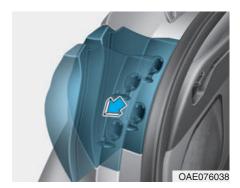


- (1) Tail/Stop lamp
- (2) Turn signal lamp
- (3) Tail lamp
- (4) Backup lamp

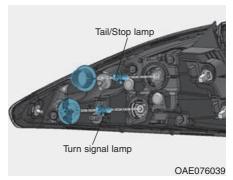


Tail/Stop lamp and turn signal lamp

- 1. Turn off the engine.
- 2. Open the tailgate.
- 3. Open the lamp assembly retaining screw covers.
- Loosen the lamp assembly retaining screws with a cross-tip screwdriver.



5. 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.
- 8. 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.
- 10. Reinstall the lamp assembly to the body of the vehicle.



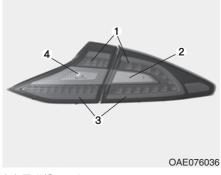
Tail lamp and backup lamp

- 1. Turn off the engine.
- 2. Open the tailgate.
- 3. Remove the service cover using a flat-blade screwdriver.



- 4. Remove the bulb by pulling it straight out.
- 5. 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.
- 7. Reinstall the service cover.

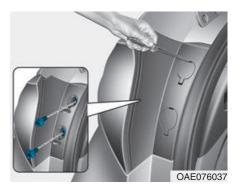
## Type B



- (1) Tail/Stop lamp
- (2) Turn signal lamp
- (3) Tail lamp
- (4) Backup lamp

### Tail/Stop lamp

If the LED lamp does not operate, we recommend that you have the vehicle checked by an authorized HYUNDAI dealer.



Turn signal lamp

- 1. Turn off the engine.
- 2. Open the tailgate.
- 3. Open the lamp assembly retaining screw covers.
- Loosen the lamp assembly retaining screws with a cross-tip screwdriver.



5. 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.
- 8. 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.
- 10. Reinstall the lamp assembly to the body of the vehicle



Backup lamp

- 1. Turn off the engine.
- 2. Open the tailgate.
- 3. Remove the service cover using a flat-blade screwdriver.



- 4. Remove the bulb by pulling it straight out.
- 5. 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.
- 7. Reinstall the service cover.

## Rear fog lamp (if equipped)

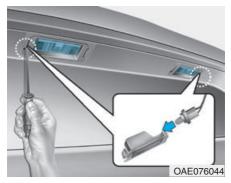
If the LED lamp does not operate, we recommend that you have the vehicle checked by an authorized HYUNDAI dealer.

## High mounted stop lamp



If the high mounted stop lamp does not operate, we recommend that you 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

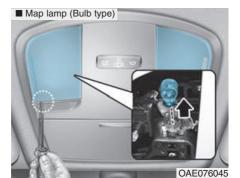
## Map lamp and room lamp



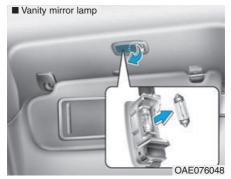


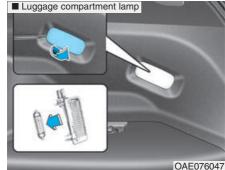
If the LED lamp does not operate, we recommend that you have the vehicle checked by an authorized HYUNDAI dealer.

## Map lamp, room lamp, vanity mirror lamp and luggage compartment lamp









- 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**

#### Exterior general caution

It is very important to follow the label directions when using any chemical cleaner or polish. Read all warning and caution statements that appear on the label.

#### High-pressure washing

- When using high-pressure washers, make sure to maintain sufficient distance from the vehicle.
   Insufficient clearance or excessive
  - 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.

#### 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, should be used.

After washing, rinse the vehicle thoroughly with lukewarm or cold water. Do not allow soap to dry on the finish.

#### **A** 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
  - 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 engine compartment including high pressure water washing may cause the failure of electrical circuits located in the engine compartment.
- Never allow water or other liquids to come in contact with electrical/electronic components inside the vehicle as this may damage them.

#### 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.

#### 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 anti-corrosion materials to the parts repaired or replaced.

### Bright-metal maintenance

- To remove road tar and insects, use a tar remover, not a scraper or other sharp object.
- To protect the surfaces of 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 fuel lines, frame, floor pan and exhaust system, even though they have been treated with rust protection.

Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It will do more harm than good to wet down the road grime without removing it. The lower edges of doors, rocker panels, and frame members have drain holes that should not be allowed to clog with dirt; trapped water in these areas can cause rusting.

## **A** WARNING

After washing the vehicle, test the brakes while driving slowly to see if they have been affected by water. If braking performance is impaired, dry the brakes by applying them lightly while maintaining a slow forward speed.

#### Aluminum wheel maintenance

The aluminum wheels are coated with a clear protective finish.

#### NOTICE

- Do not use abrasive cleaner, polishing compound, solvent, or wire brushes on aluminum wheels.
- Clean the wheel when it has cooled.
- Use only a mild soap or neutral detergent, and rinse thoroughly with water. Also, clean the wheels after driving on salted roads.
- Do not wash the wheels with high-speed car wash brushes.
- Do not use any cleaners containing acid or alkaline detergents.

## Corrosion protection

Protecting your vehicle from corrosion

By using the most advanced design and construction practices to combat corrosion, HYUNDAI produces 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, pay particular attention to the components under the fenders and other areas that are hidden from view. Do a thorough job; just dampening the accumulated mud rather than washing it away will accelerate corrosion rather than prevent it. Water under high pressure and steam are particularly effective in removing accumulated mud and corrosive materials.
- When cleaning lower door panels, rocker panels and frame members, be sure that drain holes are kept open so that moisture can escape and not be trapped inside to accelerate corrosion.

#### Keep your garage dry

Don't park your 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.

#### **Interior care**

#### Interior general precautions

Prevent caustic solutions such as perfume and cosmetic oil, from contacting the interior parts because they may cause damage or discoloration. If they do contact the interior parts, wipe them off immediately. See the instructions for the proper way to clean vinyl.

#### 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

Vinyl (if equipped)

Remove dust and loose dirt from vinyl with a whisk broom or vacuum cleaner. Clean vinyl surfaces with a vinyl cleaner.

## 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 products.

#### NOTICE

- 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.
  - Oil

Remove oil instantly with absorbable cloth and wipe with stain remover used only for natural leather.

Chewing gum
 Harden the gum with ice and remove gradually.

### Cleaning the seat belt webbing

Clean the belt webbing with any mild soap solution recommended for cleaning upholstery or carpet. Follow the instructions provided with the soap. Do not bleach or re-dye the webbing because this may weaken the seat belt.

## Cleaning the interior window glass

If the interior glass surfaces of the vehicle become fogged (that is, covered with an oily, greasy or waxy film), they should be cleaned with glass cleaner. Follow the directions on the glass cleaner container.

#### NOTICE

Do not scrape or scratch the inside of the rear window. This may result in damage to the rear window defroster grid.

#### EMISSION CONTROL SYSTEM

The emission control system of your vehicle is covered by a written limited warranty. Please see the warranty information contained in the Owner's Handbook & Warranty Information booklet in your vehicle.

Your vehicle is equipped with an emission control system to meet all applicable emission regulations. There are three emission control systems, as follows.

- (1) Crankcase emission control system
- (2) Evaporative emission control system
- (3) Exhaust emission control system

In order to ensure the proper function of the emission control systems, it is recommended that you have your vehicle inspected and maintained by an authorized HYUNDAI dealer in accordance with the maintenance schedule in this manual.

#### NOTICE

For the Inspection and Maintenance Test (with Electronic Stability Control (ESC) system)

- To prevent the vehicle from misfiring during dynamometer testing, turn the Electronic Stability Control (ESC) system off by pressing the ESC switch (ESC OFF light illuminated).
- After dynamometer testing is completed, turn the ESC system back on by pressing the ESC switch again.

## 1. Crankcase emission control system

The positive crankcase ventilation system is employed to prevent air pollution caused by blow-by gases being emitted from the crankcase. This system supplies fresh filtered air to the crankcase through the air intake hose. Inside the crankcase, the fresh air mixes with blow-by gases, which then pass through the PCV valve into the induction system.

## 2. Evaporative emission control system

The Evaporative Emission Control System is designed to prevent fuel vapors from escaping into the atmosphere.

#### Canister

Fuel vapors generated inside the fuel tank are absorbed and stored in the onboard canister. When the engine is running, the fuel vapors absorbed in the canister are drawn into the surge tank through the purge control solenoid valve.

## Purge Control Solenoid Valve (PCSV)

The purge control solenoid valve is controlled by the Engine Control Module (ECM); when the engine coolant temperature is low during idling, the PCSV closes so that evaporated fuel is not taken into the engine. After the engine warms-up during ordinary driving, the PCSV opens to introduce evaporated fuel to the engine.

## 3. Exhaust emission control system

The Exhaust Emission Control System is a highly effective system which controls exhaust emissions while maintaining good vehicle performance.

When the engine starts or fails to start, excessive attempts to restart the engine may cause damage to the emission system.

## Engine exhaust (carbon monoxide) precautions

 Carbon monoxide can be present with other exhaust fumes. If you smell exhaust fumes of any kind in your vehicle, drive with all the windows fully open. Have your vehicle checked and repaired immediately.

#### **A** WARNING

Engine exhaust gases contain carbon monoxide (CO). Though colorless and odorless, it is dangerous and could be lethal if inhaled. Follow the instructions on this page to avoid CO poisoning.

- Do not operate the engine in confined or closed areas (such as garages) any more than what is necessary to move the vehicle in or out of the area.
- When the vehicle is stopped in an open area for more than a short time with the engine running, adjust the ventilation system (as needed) to draw outside air into the vehicle.
- Never sit in a parked or stopped vehicle for any extended time with the engine running.
- When the engine stalls or fails to start, excessive attempts to restart the engine may cause damage to the emission control system.

Operating precautions for catalytic converters (if equipped)

#### **A** WARNING

The exhaust system and catalytic converter are very hot during and immediately after the engine has been running. To avoid SERIOUS INJURY or DEATH:

- Do not park, idle, or drive the vehicle over or near flammable objects, such as grass, vegetation, paper, leaves, etc. A hot exhaust system can ignite flammable items under your vehicle.
- Keep away from the exhaust system and catalytic converter or you may get burned.

Also, Do not remove the heat sink around the exhaust system, do not seal the bottom of the vehicle, and do not coat the vehicle for corrosion control. It may present a fire risk under certain conditions.

Your vehicle is equipped with a catalytic converter emission control device.

To prevent damage to the catalytic converter and to your vehicle, take the following precautions:

- Use only UNLEADED FUEL for gasoline engines.
- Do not operate the vehicle when there are signs of engine malfunction, such as misfire or a noticeable loss of performance.
- Do not misuse or abuse the engine. Examples of misuse are coasting with the hybrid system off and descending steep grades in gear with the hybrid system off.
- Do not operate the engine at high idle speed for extended periods (5 minutes or more).
- Do not modify or tamper with any part of the engine or emission control system. All inspections and adjustments must be made by an authorized HYUNDAI dealer.

 Avoid driving with an extremely low fuel level.

Running out of fuel could cause the engine to misfire, damaging the catalytic converter.

### PROCEDURE FOR ENTERING FORCED ENGINE ACTIVATION MODE

If the engine needs to be kept running while the vehicle is stopped to inspect emission gas or perform vehicle maintenance, follow below procedure to enter forced engine activation mode.

- 1. Place the shift lever in P (Park) position with the vehicle stopped. Engage the parking brake. Then, follow the steps (1) to (5).
- Information

Below steps from (1) to (5) must be completed within 60 sec. If not, the process is reset and you must start again from step (1).

- (1) Turn the ignition switch to the ON position. Vehicles equipped with the smart key, press the Engine Start/Stop button twice without depressing the brake pedal.
- (2) Place the shift lever in P (Park) position and depress the accelerator pedal twice.
- (3) Place the shift lever in N (Neutral) position and depress the accelerator pedal twice.
- (4) Place the shift lever in P (Park) position and depress the accelerator pedal twice.
- (5) With the brake pedal depressed, start the engine, and maintain idling state.
- Information

The engine remains in idle state and the forced engine activation mode is maintained even when the gear is shifted to a different position. 2. " "indicator on the instrument cluster blinks when the vehicle is in forced engine activation mode. Check the " " indicator blinking to ensure that the forced engine activation mode is correctly entered.

## Information

The "## "indicator continues blinking until the forced engine activation mode is cancelled. When the mode is cancelled the "## "indicator will stop blinking.

3. To cancel the forced engine activation mode, turn the vehicle off.

## **Specifications & Consumer information**

| Dimensions                            | 8-2 |
|---------------------------------------|-----|
| Engine                                | 8-2 |
| Bulb wattage                          |     |
| Tires and wheels                      | 8-4 |
| Tire load and speed capacity          | 8-5 |
| Air conditioning system               |     |
| Volume and weight                     |     |
| Recommended lubricants and capacities | 8-6 |
| Recommended SAE viscosity number      |     |
| Vehicle identification number (VIN)   | 8-8 |
| Vehicle certification label           | 8-8 |
| Tire specification and pressure label | 8-9 |
| Engine number                         |     |
| Air conditioner compressor label      |     |
| Declaration of conformity             |     |
|                                       |     |

## **DIMENSIONS**

| Items          |               | mm (in)       |
|----------------|---------------|---------------|
| Overall length |               | 4,470 (175.9) |
| Overall width  |               | 1,820 (71.6)  |
| Overall height | For Europe    | 1,450 (57.1)  |
| Overall height | Except Europe | 1,460 (57.4)  |
|                | 195/65 R15 *1 | 1,563 (61.5)  |
| Front tread    | 205/55 R16 *2 | 1,555 (61.2)  |
|                | 225/45 R17 *1 | 1,549 (61.0)  |
|                | 195/65 R15 *1 | 1,577 (62.0)  |
| Rear tread     | 205/55 R16 *2 | 1,569 (61.8)  |
|                | 225/45 R17 *1 | 1,563 (61.5)  |
| Wheelbase      |               | 2,700 (106.3) |

## **ENGINE**

| Engine        | Displacement cc (cu. in) | Bore x Stroke mm (in.) | Firing order | No. of cylinders   |  |
|---------------|--------------------------|------------------------|--------------|--------------------|--|
| Kappa 1.6 GDI | 1580 (96.4)              | 72 X 97 (2.8 X 3.8)    | 1-3-4-2      | In-line 4 cylinder |  |

<sup>\*1:</sup> Hybrid vehicle
\*2: Plug-in hybrid vehicle

## **BULB WATTAGE**

|           | Light bulb               |                  |                |         | Wattage |
|-----------|--------------------------|------------------|----------------|---------|---------|
|           | Headlamp                 | Low              | H7             | 55      |         |
|           | Tuno A                   | Пеацатр          | High           | HB3     | 60      |
|           | Type A                   | Position lamp    |                | W5W     | 5       |
|           |                          | Turn signal lamp |                | PY21W   | 21      |
| Front     |                          | Headlamp         | Low/High       | D8S     | 25      |
| FIOIIL    | Type B                   | Position lamp    |                | LED     | LED     |
|           |                          | Turn signal lamp |                | PY21W   | 21      |
|           | Daytime running light (D | PRL)             |                | LED     | LED     |
|           | Side repeater lamp       |                  | Outside mirror | LED     | LED     |
|           | Side repeater famp       |                  | Vehicle side   | WY5W    | 5       |
|           |                          | Tail/Stop lamp   | P21/5W         | 21/5    |         |
|           | Tuno A                   | Turn signal lamp |                | PY21W   | 21      |
|           | Type A                   | Tail lamp        |                | W5W     | 5       |
|           |                          | Backup lamp      |                | W16W    | 16      |
|           |                          | Tail/Stop lamp   |                | LED     | LED     |
| Rear      | Type B                   | Turn signal lamp |                | PY21W   | 21      |
|           | туре в                   | Tail lamp        |                | LED     | LED     |
|           |                          | Backup lamp      |                | W16W    | 16      |
|           | Fog lamp                 | ·                |                | LED     | LED     |
|           | High mounted stop lamp   | )                |                | LED     | LED     |
|           | License plate lamp       |                  |                | W5W     | 5       |
|           | Map lamp                 |                  | Type A         | W10W    | 10      |
|           | ινιαρ ιαιτιρ             |                  | Type B         | LED     | LED     |
| Interior  | Room Jamp                |                  | Type A         | FESTOON | 8       |
| iiileiioi | 1 tootii tarrip          | Room lamp Type B |                |         | LED     |
|           | Vanity mirror lamp       |                  |                | FESTOON | 5       |
|           | Luggage compartment l    | amp              |                | FESTOON | 5       |

#### TIRES AND WHEELS

|                                  |                      | Wheel     | In            | flation pressu | re, bar (kPa, p | si)                         | Wheel lug nut       |  |  |  |
|----------------------------------|----------------------|-----------|---------------|----------------|-----------------|-----------------------------|---------------------|--|--|--|
| Item                             | Tire size Wheel size |           | Normal        | l load *1      | Maximu          | ım load                     | torque              |  |  |  |
|                                  |                      | 0.20      | Front         | Rear           | Front           | Rear                        | kgf·m (lbf·ft, N•m) |  |  |  |
|                                  | 195/65 R15 *2        | 6.0J X 15 |               |                |                 |                             |                     |  |  |  |
| Full size tire                   | 205/55 R16 *3        | 6.5J X 16 | 2.5 (250, 36) | 2.5 (250, 36)  | 2.5 (250, 36)   | 2.5 (250, 36)               | 44.40               |  |  |  |
|                                  | 225/45 R17 *2        | 7.0J X 17 | 7             |                |                 | 11~13<br>- (79~94, 107~127) |                     |  |  |  |
| Compact spare tire (if equipped) | T125/80 D15          | 4.0T X 15 | 4.2 (420, 60) | 4.2 (420, 60)  | 4.2 (420, 60)   | 4.2 (420, 60)               | (70 01, 107 127)    |  |  |  |

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

#### NOTICE

- It is permissible to add 20 kPa (3 psi) to the standard tire pressure specification if colder temperatures are expected soon. Tires typically lose 7 kPa (1 psi) for every 7°C (12°F) temperature drop. If extreme temperature variations are expected, recheck your tire pressure as necessary to keep them properly inflated.
- An air pressure generally decreases, as you drive up to a high-altitude area above sea level. Thus, if you plan to drive a high-altitude area, check the tire pressures in advance. If necessary, inflate them to a proper level (Air inflation per altitude: +10 kPa/1 km (+2.4 psi/1 mile).

## **A** CAUTION

When replacing tires, use the same size originally supplied with the vehicle. Using tires of a different size can damage the related parts or not work properly.

<sup>\*2:</sup> Hybrid vehicle

<sup>\*3:</sup> Plug-in hybrid vehicle

## TIRE LOAD AND SPEED CAPACITY

| Item                             | Tire size   | Wheel size  | Load c | apacity | Speed capacity |      |  |
|----------------------------------|-------------|-------------|--------|---------|----------------|------|--|
|                                  | THE SIZE    | Wileel Size | LI *1  | kg      | SS *2          | km/h |  |
| Full size tire                   | 195/65 R15  | 6.0J X 15   | 91     | 615     | Н              | 210  |  |
|                                  | 205/55 R16  | 6.5J X 16   | 91     | 615     | Н              | 210  |  |
|                                  | 225/45 R17  | 7.0J X 17   | 91     | 615     | W              | 270  |  |
| Compact spare tire (if equipped) | T125/80 D15 | 4.0T X 15   | 95     | 690     | М              | 130  |  |

<sup>\*1</sup> LI : LOAD INDEX

## AIR CONDITIONING SYSTEM

| Items                |         | Weight of volume    | Classification                                  |  |  |
|----------------------|---------|---------------------|---|--|--|
| Refrigerant          | g (oz.) | 600±25 (21.16±0.88) | R-1234yf (For Europe)<br>R-134a (Except Europe) |  |  |
| Compressor lubricant | g (oz.) | 130±10 (4.58±0.35)  | POE   |  |  |

Contact an authorized HYUNDAI dealer for more details.

## **VOLUME AND WEIGHT**

| Gross vehicle we | eight kg (lbs.)        | Luggage volume l (cu ft) |              |                        |              |  |
|------------------|------------------------|--------------------------|--------------|------------------------|--------------|--|
| Hybrid vehicle   | Dlug in hybrid vohiolo | Hybrid                   | vehicle      | Plug-in hybrid vehicle |              |  |
| nybria veriicie  | Plug-in hybrid vehicle | Min.                     | Max.         | Min.                   | Max.         |  |
| 1,870 (4,122)    | 1,970 (4,343)          | 550 (19.4)               | 1,505 (53.1) | 446 (15.8)             | 1,401 (49.5) |  |

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

<sup>\*2</sup> SS: SPEED SYMBOL

#### RECOMMENDED LUBRICANTS AND CAPACITIES

To help achieve proper engine and powertrain performance and durability, use only lubricants of the proper quality. The correct lubricants also help promote engine efficiency that results in improved fuel economy.

These lubricants and fluids are recommended for use in your vehicle.

| L                                    | ubricant               | Volume                                     | Classification  |  |  |
|--------------------------------------|------------------------|--|---|--|--|
| Engine oil *1 *2<br>(drain and refil | 511011                 | 3.8 <i>l</i><br>(4.0 US qt.)               | 5W-30<br>ACEA A5/B5   |  |  |
| Dual clutch transmission fluid       |                        | 1.6 ~ 1.7 <i>l</i><br>(1.69 ~ 1.79 US qt.) | SAE 70W, API GL-4 HK SYN DCTF 70W (SK) SPIRAX S6 GHME 70W DCTF (H.K.SHELL) GS DCTF HD 70W (GS CALTEX) |  |  |
| Engine clutch                        | actuator fluid         | 100 ± 20 cc<br>(0.105 ± 0.021 US qt.)      | DOT 3   |  |  |
| Engine coolant                       | t                      | 6.7 l (7.07 US qt.)                        | Mixture of antifreeze and water   |  |  |
| Inverter coolan                      | t                      | 3.2 l (3.38 US qt.)                        | (Phosphate-based Ethylene glycol coolant for aluminum radiator)                                       |  |  |
| Brake fluid                          |                        | 0.7~0.8 <i>l</i><br>(0.74~0.85 US qt.)     | FMVSS116 DOT-3 or DOT-4   |  |  |
| Fuel                                 | Hybrid vehicle         | 45 l (47.5 US qt.)                         | Refer to "Fuel requirements" in the Introduction chapter.   |  |  |
| l dei                                | Plug-in hybrid vehicle | 43 l (45.4 US qt.)                         | - neier to ruer requirements in the introduction chapter.   |  |  |

<sup>\*1 :</sup> Refer to the recommended SAE viscosity numbers on the next page.

<sup>\*2 :</sup> Engine oils labeled Energy Conserving Oil are now available. Along with other additional benefits, they contribute to fuel economy by reducing the amount of fuel necessary to overcome engine friction. Often, these improvements are difficult to measure in everyday driving, but in a year's time, they can offer significant cost and energy savings.

## Recommended SAE viscosity number

## **A** CAUTION

Always be sure to clean the area around any filler plug, drain plug, or dipstick before checking or draining any lubricant. This is especially important in dusty or sandy areas and when the vehicle is used on unpaved roads. Cleaning the plug and dipstick areas will prevent dirt and grit from entering the engine and other mechanisms that could be damaged.

Engine oil viscosity (thickness) has an effect on fuel economy and cold weather operating (engine start and engine oil flowability). Lower viscosity engine oils can provide better fuel economy and cold weather performance, however, higher viscosity engine oils are required for satisfactory lubrication in hot weather. Using oils of any viscosity other than those recommended could result in engine damage.

When choosing an oil, consider the range of temperature your vehicle will be operated in before the next oil change. Proceed to select the recommended oil viscosity from the chart.

| Temperature Range for SAE Viscosity Numbers |      |     |     |   |     |    |          |                       |             |     |     |
|---|------|-----|-----|---|-----|----|----------|-----------------------|-------------|-----|-----|
| Townsonstand                                | °C   | -30 | -20 |   | -10 | 0  | 10       | 20                    | 30          | 40  | 50  |
| Temperature                                 | (°F) |     | -10 | 0 | 20  |    | 40       | 60                    | 80          | 100 | 120 |
| Gasoline Engine Oil                         |      |     |     |   |     |    |          | 20<br>15W-4<br>10W-30 | )W-50<br>10 |     |     |
|   |      |     |     |   |     | 0/ | 5W-30, 5 | W-40                  |             |     |     |

#### **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 passenger seat. To check the number, open the cover.



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

# VEHICLE CERTIFICATION LABEL



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.

## **ENGINE NUMBER**



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

# 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).

# DECLARATION OF CONFORMITY

■ Example

**C€ C€ 0678** 

CE0678

The radio frequency components of the vehicle comply with requirements and other relevant provisions of Directive 1995/5/EC.

Further information including the manufacturer's declaration of conformity is available on HYUNDAI web site as follows:

http://service.hyundai-motor.com

# **Appendix**

| Шофиране през зимата (Bulgarian) | 9-2  |
|----------------------------------|------|
| Téli vezetés (Hungarian)         | 9-6  |
| Vetrarakstur (Icelandic)         | 9-10 |
| Jazda zimą (Polish)              | 9-14 |

# ШОФИРАНЕ ПРЕЗ ЗИМАТА (BULGARIAN)

Тежките зимни атмосферни условия могат да предизвикат по-голямо износване и други проблеми. За да сведете до минимум проблемите, свързани с шофирането през зимата, следвайте препоръките подолу:

#### Сняг или поледица

За да карате своето превозно средство при дълбока снежна покривка може да се наложи да използвате зимни гуми или да поставите вериги върху тях. Ако са необ ходими зимни гуми, трябва да изберете гуми със същия размер и вид като тези на оригиналните гуми.

В противен случай това може да се отрази неблагоприятно на безопасността и експлоатацията на Вашия автомобил. Освен това карането с висока скорост, бързото ускорение, внезапното натискане на спирачки и резките завои крият сериозни опасности.

При забавяне на скоростта, използвайте доколкото възможно спирачките на дви гателя. Внезапното натискане на спирачки на заснежена или заледена настилка може да предизвика занасяне. Трябва да държате достатъчна ПОД дистанция между автомобила, който се движи пред Вас, и Вашия автомобил.

Освен това натискайте спирачката леко. Следва да се отбележи че инсталирането на веригите върху гума та ще позволи прилагането на по-голяма движеща сила, но няма да предотврати занасянето встрани.

#### К СВЕДЕНИЮ

Веригите за гуми не са позволени във всички държави. Проверете норма тивната уредба в своята страна преди да поставите вериги за гуми.

#### Г уми за сняг

Ако поставите гуми за сняг на своя авто- мобил се уверете, че това са радиалнигуми със същия размер и товарен индекс като тези на оригиналните гуми. Поставете гуми за сняг на всичките четири колела, за да балансирате експлоатацията на своя автомобил във всякакви атмос- ферни условия. Имайте предвид, че тягата на гумите за сняг върху суха настилка не може да бъде толкова голяма колкото тази на оригиналните гуми. Следва да карате внимателно, дори когато пътищата ca почистени. Консултирайте се с доставчика на гуми за максималната препоръчителна скорост.

#### **№** осторожно

#### Размер на гумите за сняг

Г умите за сняг следва да са равностойни по размер и тип на тези на стандартните гуми на автомобила. В противен случай това може да се отрази неблагоприятно на безопасността и експлоатацията на Вашия автомобил.

Не монтирайте гуми с шипове, преди да сте проверили местните, национални и общински разпоредби за възможни ограничения в тяхната употреба.

#### Вериги за гуми



Тъй като страниците на радиалните гуми са по-тънки, те могат да се повредят, ако върху тях се монтират някои видове вери- ги за сняг. Ето защо се препоръчва изпол- зването на гуми за сняг, а не на вериги за сняг. Не поставяйте вериги върху автомо- били, чиито колела са с алуминиеви джан- ти; веригите за сняг могат да повредят колелата. Ако трябва да се използват вериги за сняг, използвайте телени вериги с дебелина от поне 12 мм.

Повредата на Вашия автомобил вследствие на непра- вилната употреба на вериги за сняг не е в обхвата на гаранцията на производителя на Вашия автомобил.

Поставяйте веригите винаги по две, на предните гуми. Обърнете внимание, че поставянето на вериги на гумите на автомобила осигурява по-добра задвижваща сила, но не предпазва от странични поднасяния.

# **ВНИМАНИЕ**

• Уверете се, че размерът и веригите видът на правилните за Вашите гуми. Неправилните вериги за сняг могат да повредят каросерията и окачването на автомобила и този тип повреда може да не е в обхвата на производствената гаранция за Вашия автомобил. Също така куките за свързване веригите за сняг могат да се повредят от намиращите се в контакт с тях автомобилни части, като това може да доведе до разхлабването им. Уверете се, че веригите за сняг клас S според ca ОТ класификацията на Дружеството на автомобилните инженери (SAE).

(продолжение)

#### (продолжение)

• Винаги проверявайте дали вериги- те са били поставени правилно след като изминете около 0,5 до 1 км, за да се уверите в безопасното им поставяне. Затегнете веригите или ги поставете отново, ако са се разхлабили.

#### Монтиране на вериги

Когато инсталирате веригите. следвайте инструкциите производителя и ги затег- нете максимално. Карайте бавно с инста- лирани вериги. Ако чуете, че веригите са навлезли в контакт с каросерията или шасито, спрете и ги затегнете. Ако те все още са в контакт, намалете скоростта до преустановяване на контакта. Свалете веригите веднага, щом започнете да карате ПО почистените пътиша.

# **№** осторожно

#### Поставяне на вериги

Когато поставите вериги за сняг, пар- кирайте автомобила на равно място далеч от пътното движение. Включете аварийните светлини и поставете светлоотразителния три- ъгълник зад автомобила, ако разпо- лагате с такъв. Винаги паркирайте автомобила в паркинг, дръпнете ръч-ната спирачка и изключете двигателя преди да поставите веригите за сняг.

#### **№** осторожно

#### Вериги за гуми

- Използването на вериги може да се отрази неблагоприятно на работата на Вашия автомобил.
- Не надвишавайте пределната ско- рост, препоръчана от производителя, или скоростта от 30 км/ч, което е по- ниско.
- Карайте внимателно и избягвайте неравности, дупки, резки завои и други опасности на пътя, които могат да накарат автомобила да подскача.
- Избягвайте резките завои или изпол- зването на спирачки, ако колелата са блокирани.

# **ВНИМАНИЕ**

- Веригите с грешен размер или тези, които са неправилно инсталирани, могат да повредят спирачните накладки, окачването, каросерията и колелата.
- Спрете и затегнете веригите повтор- но винаги, щом ги чуете да удрят автомобила.

# TÉLI VEZETÉS (HUNGARIAN)

Télen a nehéz időjárási feltételek nagyobb elhasználódást és más problémákat eredményezhetnek. A téli vezetés problémáinak csökkentése érdekében célszerű követnie a következő javaslatokat:

# Havas vagy jeges útviszonyok

Mély hóban közlekedéshez szükség lehet téli gumiabroncsok használatára vagy kerekeire hólánc felszerelésére. Ha téli gumiabroncsokra van szüksége, a gyárilag felszerelttel megegyező méretű és típusú gumiabroncsot kell választani. Ennek figyelmen kívül hagyása hátrányosan befolyásolja gépkocsija biztonságát és vezethetőségét. Ezen túlmenően a nagy sebességű haladás, a hirtelen gyorsítás, a hirtelen fékezés és a gyors kanyarvétel nagyon veszélyes gyakorlat.

Lassításkor a lehető legjobban használja ki motorja fékhatását. Havas vagy jeges úton a hirtelen fékezés megcsúszást okozhat. Elegendően nagy követési távolságot kell tartania saját gépkocsija és az Ön előtt haladó jármű között. Tehát óvatosan fékezzen. Jegyezze meg, hogy hólánc használatakor megnő a hajtóerő, de nem segít az oldalra kicsúszás elkerülésében.

#### MEGJEGYZÉS

A hólánc nem legális minden országban. Ellenőrizze az Ön országának törvényeit, mielőtt felszereli a hóláncot.

#### Téli gumiabroncs

Ha téli gumiabroncsot akar használni, először győződjön meg arról, hogy megfelelő ezek méretű terhelhetőségű radiál abroncsok. Kifejezetten javasoljuk, hogy mind a négy kerékre szereltessen téli gumiabroncsot, hogy biztosítsa gépkocsija jó vezethetőségét. Ne feledje, hogy a téli gumiabroncsok tapadása száraz úton nem olyan jó, mint a gépkocsira eredetileg felszerelt gumiabroncsoké. Még tiszta úton is óvatosan kell vezetnie. Tájékozódjon a gumiszerelőnél megengedett а legnagyobb sebességgel kapcsolatban.

A VIGYÁZAT!

#### A téli gumiabroncsok mérete

A téli gumiabroncsnak mind méretében, mind szerkezetében meg kell egyeznie az eredeti nyárival. Ellenkező esetben gépkocsija biztonsága és vezethetősége kedvezőtlenül változhat.

Ne szereltessen fel szöges gumiabroncsot, mielőtt tájékozódna a használatukra, illetve esetleges tiltásukra vonatkozó helyi előírásokról.

#### Hólánc



Mivel a radiál gumiabroncsok oldalfala vékonyabb, megsérülhetnek bizonyos fajtájú hólánc felszerelésétől. Ezért inkább javasoljuk a téli gumiabroncsok használatát. mint а hólánc használatát. Ne szereljen fel hóláncot alumínium keréktárcsás kerékre, mivel a hólánc sérüléseket okozhat a keréktárcsán. Ha mégis hóláncot kellene használnia, használjon 12 mm-es átmérőnél kisebb, kábeltípusú hóláncot. Gépkocsijának a hólánc helytelen használatából eredő káraira nem vonatkozik a garancia.

A hóláncot mindig párban szerelje fel az első kerekekre. Fontos megjegyezni, hogy a kerekekre felszerelt hólánc nagyobb tapadóerőt biztosít, azonban nem akadályozza meg a kicsúszást oldalra.

# **⚠** FIGYELEM!

- Ügyeljen arra, hogy a hólánc a qumiabroncsaihoz megfelelő méretű és típusú legyen. A nem megfelelő méretű hólánc megrongálhatja gépkocsija karosszériáiát felfüggesztéseit, és erre nem vonatkozik aépkocsi а Ezenkívül garanciáia. hólánc összekötő kapcsai megsérülhetnek karosszériához ütődéstől. amitől a hólánc meglazulhat. leeshet a kerékről. és Kizárólag az SAE szabvány szerinti "S" osztályú hóláncot használion.
- 0,5 1km megtétele után ellenőrizze megfelelő elhelyezkedésüket a biztonságos felszerelésük érdekében. Ha meglazultak, húzza meg újra, vagy szerelje fel ismét a hóláncokat.

#### A hylбnc felszerelйse

A hólánc felszerelésekor figyelmesen kövesse gyártójának utasításait, és a lehető legfeszesebbre húzza meg a láncot. A felszerelt hólánccal lassan közlekedjen. Ha a lánc hozzáverődik a karosszériához vagy az alvázhoz, álljon meg és feszítsen rajta. Ha még mindig hozzáér, lassítson le annyira, hogy megszűnjön a kontaktus. Haladéktalanul távolítsa el a láncokat, amint tiszta útra ér.

# A VIGYÁZAT!

#### Hólánc felszerelése

Forgalomtól távol eső sík felületen álljon félre. Kapcsolja be a vészvillogót és tegyen ki elakadásjelző háromszöget a gépkocsi mögé. A hólánc felszerelése előtt mindig kapcsolja P állásba a sebességváltó választókarját, működtesse a rögzítőféket, majd állítsa le a motort.

# A VIGYÁZAT!

#### Hólánc

- A hólánc használata jelentősen korlátozza a gépkocsi kezelhetőségét.
- Ne lépje túl a 30 km/h sebességet, vagy a hólánc gyártója által meghatározott maximális sebességet. Mindig a kettő közül alacsonyabb értéket tartsa be.
- Vezessen óvatosan, kerülje a bukkanókat, lyukakat, éles kanyarokat és az úton előforduló egyéb veszélyforrásokat, melyek a gépkocsi erős berugózását okozzák.
- Tartózkodjon az éles kanyarvételtől és a blokkoló kerekekkel történő fékezéstől.

# **⚠** FIGYELEM!

- A nem megfelelő méretű vagy rosszul felszerelt hólánc megrongálhatja gépkocsija féktömlőit, felfüggesztéseit, karosszériáját és a kerekeit.
- Álljon meg és húzza feszesebbre a hóláncokat, ha beleütnek a gépkocsi valamelyik alkatrészébe.

#### **VETRARAKSTUR (ICELANDIC)**

Akstur í þungri færð og vetrarveðri leiðir til aukins slits á ökutækinu og skapar ýmis vandamál. Hægt er að draga úr erfiðleikum sem fylgja vetrarakstri ef farið er að þessum ráðleggingum:

# Akstur í snjó eða hálku

Við akstur í djúpum snjó kann að vera nauðsynlegt að nota vetrarhjólbarða eða setja keðjur á hjólbarðana. Reynist nauðsynlegt að nota vetrarhjólbarða þarf að velja hjólbarða af sömu stærð og gerð og venjulegu hjólbarðarnir. Sé það ekki gert getur það dregið úr öryggi og skert aksturseiginleika ökutækisins.

Hraðakstur, skyndileg hröðun, nauðhemlun og krappar beygjur geta enn fremur falið í sér mikla hættu.

Pegar dregið er úr hraða er ráðlegt að beita vélarhemlun sem kostur er. Við nauðhemlun á snævi þöktum eða hálum vegum getur ökutækið hæglega runnið til. Nauðsynlegt er að halda hæfilegri fjarlægð á milli þíns ökutækis og ökutækisins fyrir framan. Alltaf ætti að beita hemlinum mjúklega. Hafa ber í huga að ef keðjur eru settar á hjólbarða fæst aukinn drifkraftur en það hindrar þó ekki að ökutækið renni til hliðanna.

#### ATHUGIÐ

Notkun snjókeðja er ólögleg í sumum ríkjum. Kynnið ykkur gildandi landslög áður en keðjur eru settar upp.

#### Vetrarhjólbarðar

Ef vetrarhjólbarðar eru settir á ökutækið þarf að gæta þess að nota bverofna hjól- barða af sömu stærð og ásbunga oq upprunalegu hjólbarðarnir. Setjið vetrarhjólbarða á öll fjögur hjólin til að tryggja örugga ökutækisins við stýringu veðurskilyrði. Hafið í huga að á auðum vegi kunna vetrarhjólbarðar að hafa minna grip en hjólbarðarnir sem fylgdu ökutækinu. Því þarf að aka af gætni, jafnvel á auðum vegum. Ráðfærið vkkur við söluaðila hjólbarðanna um ráðlagðan hámarkshraða.

**▲** VIÐVÖRUN

Stærðir vetrarhjólbarða

Vetrarhjólbarðar ættu að vera af sömu stærð og gerð og hjólbarðarnir sem fylgdu ökutækinu.

Misræmi á því getur dregið úr öryggi og skert aksturseiginleika ökutækisins. Áður en negldir hjólbarðar eru settir upp er rétt að kynna sér reglugerðir um notkun slíkra hjólbarða í viðkomandi landi, fylki eða sveitarfélagi.

### Keðjur á hjólbarða



Hliðar þverofinna hjólbarða eru þynnri en á öðrum hjólbörðum og sumar gerðir snjókeðja geta því valdið skemmdum á þeim. Því er ráðlegt að nota vetrarhjólbarða fremur en keðjur, ef þess er kostur.

Setjið aldrei keðjur á hjólbarða ökutækja sem búin eru álfelgum þar sem keðjurnar geta valdið skemmdum á felgunum. Ef óhjákvæmilegt reynist að nota keðjur skal nota vírkeðjur sem eru innan við 12 mm á þykkt.

Ábyrgðartrygging söluaðila ökutækisins tekur ekki til skemmda sem orsakast af rangri notkun snjókeðja. Aðeins skal setja keðjur á í pörum og aðeins á framhjólbarðana. Hafa ber í huga að ef keðjur eru settar á hjólbarða fæst aukinn drifkraftur. Það hindrar þó ekki að ökutækið renni til hliðanna.

# **A** VARÚĐ

- Gætið þess að snjókeðjurnar séu af þeirri stærð og gerð sem hæfir hiólbörðunum. Notkun snjókeðja af rangri gerð getur valdið skemmdum á yfirbyggingu og fjöðrun ökutækisins og kann að falla ábyrgðartryggingar utan söluaðila ökutækisins. Þá geta festikrókar keðianna skemmst vegan núnings við ökutækisins íhluti oa sniókeðiurnar losnað af hjólbarðanum. Gætið þess að sniókeðiurnar séu með SAEvottun í S-flokki
- Eftir um það bil 0,5-1 km akstur skal ævinlega skoða keðjurnar aftur til að tryggja að þær hafi verið settar upp á réttan og öruggan hátt. Herðið keðjurnar eða setjið þær aftur á ef þær hafa losnað.

#### Uppsetning 6 kepjum

Pegar keðjur eru settar á skal fylgja leiðbeiningum framleiðanda og herða keðjurnar eins mikið og unnt er. Pegar keðjur hafa verið settar á skal aka hægt. Ef hljóð heyrist sem bendir til að keðjurnar séu í snertingu við yfirbyggingu eða undirvagn er rétt að nema staðar og herða keðjurnar. Ef snerting virðist enn eiga sér stað skal hægja aksturinn þar til hljóðið þagnar. Takið keðjurnar niður um leið og komið er á rudda og snjólausa vegi.

# A VIÐVÖRUN

#### Uppsetning á keðjum

Pegar snjókeðjur eru settar upp skal leggja ökutækinu á sléttum fleti fjarri umferð. Kveikið á viðvörunarljósum ökutækisins og setjið þríhyrningslaga viðvörunarskilti upp fyrir aftan ökutækið, ef það er tiltækt. Hafið ökutækið ævinlega í stöðuhemli og drepið á vélinni áður en snjókeðjur eru settar upp.

### **▲** VIÐVÖRUN

#### Keðjur á hjólbarða

- Notkun keõja getur skert aksturs- eiginleika ökutækisins.
- Akið ekki hraðar en 30 km/klst. eða samkvæmt ráðlögðum hámarkshraða framleiðanda keðjanna, hvort sem reynist lægra.
- Akið gætilega og sneiðið hjá þústum, holum, kröppum beygjum og öðrum hættum á veginum, sem gætu valdið hristingi ökutækisins.
- Forðist krappar beygjur eða læsta hemlun.

# **⚠ VARÚÐ**

- Séu snjókeðjur af rangri stærð eða rangt upp settar geta þær valdið skemmdum á hemlalögn, fjöðrun, yfirbyggingu og hjólum ökutækisins.
- Hvenær sem hljóð bendir til þess að keðjurnar sláist við ökutækið skal stöðva akstur og herða keðjurnar.

# JAZDA ZIMĄ (POLISH)

Surowe warunki pogodowe zimą powodują większe zużycie pojazdu i inne problemy. Aby zminimalizować problemy związane z jazdą w zimie, postępuj zgodnie z poniższymi sugestiami:

# Jazda w warunkach śniegowych i przy oblodzeniu

Aby prowadzić pojazd w głębokim śniegu, może okazać się niezbędne zimowych użycie opon lub zainstalowanie łańcuchów śniegowych. Jeśli potrzebne okażą się opony zimowe, konieczne jest wybranie opon o rozmiarze i typie odpowiadających oponom, w jakie pojazd był pierwotnie wyposażony. Jeśli założone zostana nieodpowiednie opony, będzie to miało negatywny wpływ na bezpieczeństwo i prowadzenie pojazdu. Ponadto jazda z nadmierna prędkością, gwałtowne przyspieszanie, nagłe hamowanie i ostre skretv beda stanowity potencjalnie duże bardzo niebezpieczeństwo.

Podczas zwalniania należy w pełni wykorzystać hamowanie silnikiem. Nagłe hamowanie na zaśnieżonej lub oblodzonej drodze może spowodować poślizg pojazdu.

Należy utrzymywać odpowiedni odstęp od pojazdu jadącego z przodu. Hamulców należy używać ostrożnie. Należy pamiętać, że założenie łańcuchów śniegowych zapewni większą siłę napędową, ale nie zapobiegnie ślizganiu się na boki.

#### UWAGA

Stosowanie łańcuchów śniegowych nie jest zgodne z prawem we wszystkich krajach. Przed założeniem łańcuchów śniegowych należy sprawdzić przepisy danego kraju.

#### Opony zimowe

Kiedy zakładane są opony zimowe, należy upewnić się, że są to opony radialne o takim samym rozmiarze i zakresie obciążeń co pierwotne opony pojazdu. Opony zimowe należy zakładać na wszystkie cztery koła pojazdu, by we wszystkich warunkach pogodowych pojazd pozwalał się prowadzić równomiernie. Należy pamiętać, że przyczepność zapewniana przez opony zimowe na suchej drodze może nie być równie przyczepność wysoka iak pierwotnych opon pojazdu. Pojazd należy prowadzić ostrożnie nawet wtedy, gdy drogi są oczyszczone. Aby poznać informacje na temat zalecanych ograniczeń prędkości dla danych opon, należy skontaktować sie ze sprzedawca opon.

### A OSTRZEŻENIE

#### Rozmiar opon zimowych

Opony zimowe powinny mieć rozmiar i typ odpowiadający standardowym oponom pojazdu. Jeśli tak nie jest, może to mieć negatywny wpływ na bezpieczeństwo i prowadzenie pojazdu.

Opon okolcowanych nie należy zakładać bez uprzedniego sprawdzenia w przepisach lokalnych, stanowych i miejskich, czy na ich użycie nie są nałożone ograniczenia.

# Łańcuchy śniegowe (przeciwpoślizgowe)



Ponieważ ścianki boczne opon radialnych są cieńsze, założenie niektórych rodzajów łańcuchów śniegowych może spowodować ich uszkodzenie. Z tego względu zaleca się korzystanie z opon zimowych zamiast łańcuchów śniegowych nie należy zakładać w pojazdach, które są wyposażone w felgi aluminiowe, ponieważ mogą one powodować uszkodzenia felg. Jeśli użycie łańcuchów śniegowych jest niezbędne, należy zastosować łańcuchy drutowe o grubości poniżej 12 mm.

Uszkodzenia pojazdu spowodowane użyciem niewłaściwych łańcuchów śniegowych nie jest objęte gwarancją producenta pojazdu.

Łańcuchy na opony należy zakładać jedynie parami i na przednich oponach. Należy pamiętać, że założenie łańcuchów na oponach zwiększy siłę napędową, ale nie zapobiegnie poślizgowi bocznemu.

# **A OSTROŻNIE**

 Należy upewnić się, że łańcuchy śniegowe mają odpowiedni rozmiar i typ dla opon pojazdu. Zastosowanie niewłaściwych łańcuchów śniegowych może spowodować uszkodzenie nadwozia oraz zawieszenia, a zniszczenia powstałe w ten sposób mogą nie być objęte gwarancją producenta pojazdu.

(Ciąg dalszy)

#### (Ciąg dalszy)

Ponadto, haczyki łączące łańcuchów śniegowych mogą zostać zniszczone na skutek stykania się z elementami samochodu, co może spowodować zsunięcie się łańcuchów z opon. Należy upewnić się, że łańcuchy śniegowe są klasy "S" SAE i posiadają certyfikat.

 Po przejechaniu ok. 0,5 do 1 km (0,3 do 0,6 mil), dla zachowania bezpieczeństwa, należy zawsze sprawdzić, czy łańcuchy śniegowe zostały poprawnie założone. Jeśli łańcuchy poluzowały się, należy je zacisnąć lub założyć ponownie.

#### Zakiadanie iaccuchyw њniegowych

Zakładając łańcuchy śniegowe należy postępować zgodnie z instrukcjami podanymi przez producenta. Łańcuchy należy założyć tak ciasno, iak to tylko możliwe. Kiedy łańcuchy są już założone, pojazd należy prowadzić powoli. Jeśli dadzą się słyszeć dźwięki świadczące o tym, że łańcuchy stykają sie z nadwoziem lub podwoziem, należy zatrzymać samochód zacisnąć je. Jeśli łańcuchy wciąż stykają się z elementami pojazdu, należy zmniejszać prędkość, aż łańcuchy przestaną uderzać w samochód. Łańcuchy należy zdjąć jak tvlko rozpocznie się jazdę po oczyszczonei drodze.

#### A OSTRZEŻENIE

# Zakładanie łańcuchów śniegowych

Aby założyć łańcuchy śniegowe, należy zatrzymać pojazd na płaskim podłożu, z dala od ruchu drogowego. Włączyć światła awaryjne pojazdu i umieścić za nim trójkat ostrzegawczy, jeśli iest dostepny. Zanim on rozpocznie sie instalowanie łańcuchów śniegowych dźwignie zmiany biegów należy zawsze umieścić w położeniu P (Postój), zaciągnać hamulec postojowy i wyłaczyć silnik.

### A OSTRZEŻENIE

#### Łańcuchy śniegowe

- Użycie łańcuchów śniegowych może mieć negatywny wpływ na prowadzenie pojazdu.
- Pojazdu nie należy prowadzić szybciej niż 30 km/h (20 mil/h) lub z prędkością większą, niż zalecana przez producenta, którakolwiek z tych wartości okaże się mniejsza.
- Pojazd należy prowadzić ostrożnie i unikać wybojów, dziur, ostrych skrętów i innych zagrożeń drogowych, które mogą powodować podskakiwanie pojazdu.
- Należy unikać ostrych zakrętów lub hamowania z zablokowanymi kołami.

# **A OSTROŻNIE**

- Łańcuchy o niewłaściwym rozmiarze lub niepoprawnie założone mogą uszkodzić linki hamulcowe pojazdu, zawieszenie, nadwozie oraz koła.
- Za każdym razem, kiedy da się usłyszeć, że łańcuchy uderzają w samochód, należy zatrzymać się i zacisnąć je.

# A

| Air bag warning labels                        | 2-72  |
|---|-------|
| Air bags                                      | 2-51  |
| Additional safety precautions                 | 2-71  |
| Air bag collision sensors                     | 2-65  |
| Air bag inflation conditions                  | 2-67  |
| Air bag non-inflation conditions              | 2-68  |
| Air bag warning labels                        | 2-72  |
| Curtain air bags                              | 2-58  |
| Do not install a child restraint on the front |       |
| passenger seat                                |       |
| Driver's air bag                              | 2-54  |
| Driver's knee airbag                          |       |
| How does the air bags system operate?         |       |
| Passenger's front air bag ON/OFF switch       | 2-55  |
| Passenger's front air bag                     | 2-54  |
| Side air bags                                 | 2-57  |
| SRS Care                                      |       |
| SRS components and functions                  |       |
| SRS warning light                             | 2-60  |
| What to expect after an air bag inflates      |       |
| Why didn't my air bag go off in a collision   | 2-65  |
| Air cleaner                                   |       |
| Air conditioner compressor label              | 8-9   |
| Air conditioning refrigerant label            |       |
| Air conditioning system specification         |       |
| Air ventilation seats                         | 2-22  |
| Air conditioning system                       | 3-127 |
|   |       |

| Alarm system                              | 3-17  |
|---|-------|
| antenna                                   |       |
| anti-lock brake system (ABS)              | 5-31  |
| Appearance care                           |       |
| Exterior care                             |       |
| Interior care                             |       |
| Armrest                                   | 2-16  |
| shtray                                    | 3-147 |
| Audio / Video / Navigation (AVN) system   |       |
| Auto defogging system                     |       |
| Luto light position                       |       |
| Automatic climate control system          |       |
| Air conditioning                          |       |
| Air Conditioning refrigerant label        |       |
| Air intake control                        |       |
| Automatic heating and air conditioning    |       |
| Driver only                               |       |
| Fan speed control                         |       |
| Manual heating and air conditioning       |       |
| Mode selection                            |       |
| OFF mode                                  |       |
| SYNC button                               | 3-132 |
| System maintenance                        | 3-138 |
| Temperature control                       |       |
| Temperature unit conversion               |       |
| Automatic ventilation                     |       |
| autonomous emergency braking (AEB) system |       |
| ux USB and iPod                           |       |

# В

| Battery (12 volt, Plug-in hybrid vehicle) | 7-38  |
|---|-------|
| Battery recharging                        |       |
| Battery cooling duct                      |       |
| Battery saver function                    | 3-111 |
| Before driving                            |       |
| Blind spot detection (BSD) system         | 5-40  |
| Bluetooth® Wireless Technology hands-free | 4-4   |
| Bottle holder                             |       |
| Brake fluid                               |       |
| Brake system                              | 5-27  |
| Anti-lock brake system (ABS)              | 5-31  |
| Disc brakes wear indicator                |       |
| Electronic stability control (ESC)        | 5-33  |
| Emergency stop signal (ESS)               | 5-38  |
| Good braking practices                    | 5-39  |
| Hill-start assist control (HAC)           | 5-38  |
| Parking brake                             | 5-28  |
| Power brakes                              | 5-27  |
| Vehicle stability management (VSM)        | 5-36  |
| Bulb replacement                          |       |
| Daytime running lamp                      | 7-76  |
| Front position lamp                       | 7-68  |
| Front turn signal lamp                    |       |
| Headlamp                                  | 7-68  |
| Headlamp aiming                           |       |
| High mounted stop lamp                    |       |
|   |       |

| Interior light bulb                             | 7-82 |
|---|------|
| License plate light bulb                        |      |
| Rear combination lamp bulb                      |      |
| Rear fog lamp                                   |      |
| Side repeater lamp                              |      |
| Bulb wattage                                    |      |
| Button start/stop, see engine start/stop button |      |

| Camera (Rear view)                        | 3-120 |
|---|-------|
| Capacities (Lubricants)                   |       |
| Care                                      |       |
| Exterior care                             | 7-84  |
| Interior care                             | 7-89  |
| Tire care                                 | 7-42  |
| Cellular phone charger                    |       |
| Center console storage                    |       |
| Central door lock switch                  |       |
| Certification label                       | 8-8   |
| Chains                                    |       |
| Tire chains                               | 5-100 |
| Checking tire inflation pressure          | 7-44  |
| Child restraint system (CRS)              |       |
| Booster seats                             |       |
| Children always in the rear               |       |
| Forward-facing child restraint system     |       |
| Installing a child restraint system (CRS) |       |
| •   |       |

| ISOFIX anchorage and top-tether anchorage                  |       |
|--|-------|
| for children   |       |
| Rearward-facing child restraint system                     | 2-39  |
| Securing a child restraint system seat with                |       |
| "Top-tether Anchorage" system                              | 3-44  |
| Securing a child restraint system with a lap/shoulder belt | 3_46  |
| Securing a child restraint system with the                 | 5-40  |
| "ISOFIX Anchorage System"                                  | 2-43  |
| Selecting a child restraint system (CRS)                   |       |
| Child-protector rear door lock                             |       |
| Cigarette lighter  |       |
| Clean air  | 3-144 |
| Climate control air filter                                 | 7-33  |
| Clock  | 3-152 |
| Clothes hanger   |       |
| Coasting guide   | 5-26  |
| Combined instrument, see instrument cluster                | 3-45  |
| Compact spare tire replacement                             | 7-47  |
| Coolant  | 7-25  |
| Cooling fluid, see engine coolant/inverter coolant         | 7-25  |
| Crankcase emission control system                          | 7-92  |
| Cruise control system                                      | 5-73  |
| Cup holder   | 3-147 |
| Curtain air bags   | 2-58  |

# D

| Dashboard illumination, see instrument panel |       |
|--|-------|
| illumination                                 | 3-47  |
| Dashboard, see instrument cluster            | 3-45  |
| Day/night rearview mirror                    | 3-23  |
| Daytime running light (DRL)                  | 3-111 |
| Defogging (Windshield)                       |       |
| Defroster                                    | 3-142 |
| Rear window defroster                        |       |
| Defrosting (Windshield)                      |       |
| Dimensions                                   |       |
| Display illumination, see instrument panel   |       |
| illumination                                 | 3-47  |
| Displays, see instrument cluster             |       |
| Distance to empty (for cluster type B)       | 3-52  |
| Door locks                                   |       |
| Auto door lock/unlock features               | 3-16  |
| Central door lock switch                     |       |
| Child-protector rear door lock               |       |
| Drinks holders, see cup holders              |       |
| Driver position memory system                |       |
| Recalling memory positions                   |       |
| Storing memory positions                     |       |
| Driver's air bag                             |       |
| Driver's knee airbag                         |       |
| Driving at night                             |       |
| Driving in flooded areas                     |       |
| Driving in the rain                          |       |
|  |       |

| Dual clutch transmission  | -9<br>23<br>-2<br>-9 |
|---|----------------------|
| Good driving practices  | 23<br>-2<br>-9       |
|   | -2<br>-9<br>92       |
| Manual shift made   | -9<br>92             |
| Manual shift mode   | 92                   |
| Paddle shifter  |                      |
| Shift lever position5-19 Evaporative emission control System7-9     |                      |
| Shift lock system5-22 Exhaust emission control system7-9            | <del>)</del> 2       |
| Shift-lock release  | 21                   |
| Dual clutch transmission shift indicator3-53 Exterior care          | 34                   |
| Exterior overview   |                      |
| <b>E</b> Front view1-   | -2                   |
| Rear view1-   | -3                   |
| Easy access function3-19  |                      |
| ECO mode  |                      |
| Electric chromic mirror (ECM)3-23                                   |                      |
| Electric power steering (EPS)3-20 Flat tire                         |                      |
| Electronic stability control (ESC)5-33 Changing tires6-2            | 21                   |
| Emergency commodity   | 27                   |
| Emergency stop signal (ESS)5-38 Jack and tools6-2                   | 20                   |
| Emergency towing6-45 Jack label6-2                                  | 26                   |
| Emission control system7-91 Tire Mobility Kit (TMK)6-2              | 28                   |
| Crankcase emission control system7-92 Use of compact spare tires6-2 |                      |
| Evaporative emission control System7-92 Floor mat anchor(s)3-15     |                      |
| Exhaust emission control system7-92 Fluid                           |                      |
| Engine compartment 1-8 Brake fluid 7-2                              | 29                   |
| Hybrid vehicle  | 30                   |
| Plug-in hybrid vehicle  |                      |
| Engine compartment panel fuse replacement7-55                       | -                    |
| Engine coolant  |                      |

# Index

| Front seat adjustment                     | 2-7  |
|---|------|
| Manual adjustment                         | 2-8  |
| Power adjustment                          | 2-10 |
| Seatback pocket                           | 2-13 |
| Front seat headrests                      |      |
| Forward and rearward adjustment           | 2-18 |
| Removal/Reinstall                         | 2-18 |
| Fuel filler door                          |      |
| Hybrid vehicle                            | 3-39 |
| Plug-in hybrid vehicle                    | 3-42 |
| Fuel gauge                                | 3-49 |
| Fuel requirements                         |      |
| Fuse switch                               |      |
| Fuse/relay panel description              |      |
| Engine compartment fuse panel             |      |
| Instrument panel fuse panel               | 7-57 |
| Fuses                                     | 7-53 |
| Engine compartment panel fuse replacement | 7-55 |
| Fuse switch                               | 7-55 |
| Fuse/relay panel description              | 7-57 |
| Instrument panel fuse replacement         |      |
| Main fuse                                 |      |
| Multi fuse                                |      |
|   |      |

# G

| Gauges and meters    | 3-44  |
|----------------------|-------|
| Glove box            | 3-145 |
| Gross vehicle weight | 8-5   |

# Н

| Hazard warning flasher                     | 6-2   |
|--|-------|
| Hazardous driving conditions               | 5-96  |
| Headlamp bulb replacement                  | 7-67  |
| Headlamp delay function                    | 3-111 |
| Headlamp leveling device                   |       |
| Headlamp position                          |       |
| Headrest                                   |       |
| Front seat headrests                       | 2-17  |
| Rear seat headrests                        | 2-20  |
| Heated steering wheel                      |       |
| Heater                                     |       |
| Height adjustment                          | 2-30  |
| High beam operation                        |       |
| Highway driving                            |       |
| Hill-start assist control (HAC)            |       |
| Hood                                       |       |
| Horn                                       |       |
| How to use this manual                     | F-5   |
| Hybrid battery SOC (State of Charge) gauge |       |
| Hybrid starter&generator (HSG) belt        |       |

| If the 12 volt battery is discharged (hybrid vehic | le)6-5 |
|--|--------|
| If the 12 volt battery is discharged               |        |
| (plug-in hybrid vehicle)                           | 6-9    |
| If the engine overheats                            |        |
| If the engine stalls at a crossroad or crossing    | 6-2    |
| If the engine stalls while driving                 | 6-2    |
| If the engine will not start                       | 6-4    |
| If you have a flat tire                            | 6-20   |
| If you have a flat tire while driving              | 6-3    |
| Ignition switch                                    | 5-5    |
| Engine Start/Stop button                           | 5-9    |
| Key ignition switch                                |        |
| Immobilizer system                                 |        |
| Impact sensing door unlock                         | 3-16   |
| Important safety precautions                       | 2-2    |
| Air bag hazards                                    | 2-2    |
| Always wear your seat belt                         |        |
| Control your speed                                 |        |
| Driver distraction                                 | 2-2    |
| Keep your vehicle in safe condition                |        |
| Restrain all children                              |        |
| In case of emergency while driving                 |        |
| Indicator light                                    |        |
| Inside rearview mirror                             |        |
| Instrument cluster                                 |        |
| Instrument panel illumination                      |        |
| Dual clutch transmission shift indicator           |        |
|  |        |

| Gauges and meters                       | 3-47  |
|---|-------|
| LCD display control                     |       |
| LCD display messages                    |       |
| LCD display modes                       |       |
| Trip computer                           |       |
| User settings mode                      |       |
| Warning and indicator lights            |       |
| Instrument panel fuse replacement       |       |
| Instrument panel overview               |       |
| Interior care                           |       |
| Interior care:                          | /-0/  |
| Ashtray                                 | 3 147 |
| Cigarette lighter                       |       |
|   |       |
| Clock Clother hanger                    |       |
| Clothes hanger                          |       |
| Cup holder                              |       |
| Floor mat anchor(s)                     |       |
| Luggage net (holder)                    |       |
| Power outlet                            |       |
| Sunvisor                                | 3-148 |
| Wireless cellular phone charging system | 3-150 |
| Interior lamp AUTO cut                  | 3-114 |
| Interior lights                         | 3-114 |
| Front lamps                             |       |
| Interior lamp AUTO cut                  |       |
| Luggage compartment lamp                |       |
| Puddle lamp                             |       |
| Rear lamps                              |       |
| Vanity mirror lamp                      |       |
| y r                                     |       |

# Index

| Interior overview                     | 1-4      | Light   | 3-104       |
|---------------------------------------|----------|---|-------------|
| Inverter coolant                      |          | Auto light position                                       |             |
|                                       |          | Battery saver function                                    |             |
| J                                     |          | Daytime running light (DRL)                               |             |
|                                       |          | Headlamp delay function                                   |             |
| Jack and tools                        |          | Headlamp leveling device                                  |             |
| Jump starting                         | 6-6, 9   | Headlamp position   |             |
| 1                                     |          | High beam operation                                       |             |
| L                                     |          | Position lamp position                                    |             |
| Label                                 |          | Rear fog lamp   | 3-110       |
| Air conditioner compressor label      | 8-9      | Rear fog lamp   | 3-110       |
| Tire sidewall labeling                |          | Turn signals  | 3-109       |
| Tire specification and pressure label |          | Light bulbs   | 7-67        |
| Vehicle certification label           |          | Lubricants and capacities                                 | 8-6         |
| Lane keeping assist system (LKAS)     |          | Luggage compartment lamp                                  | 3-115       |
| Lap/shoulder belt                     |          | Luggage net (holder)                                      | 3-154       |
| LCD display                           |          | Luggage volume  | 8-5         |
| Assist mode                           |          |   |             |
| Information mode                      | 3-84     | M   |             |
| LCD display modes                     |          | Main fuse   | 7.54        |
| SCC/LKAS mode                         |          | Maintenance   | /-30        |
| Trip computer mode                    | 3-83, 90 |   | itams 7.21  |
| Turn By Turn (TBT) mode               |          | Explanation of scheduled maintenance Maintenance services |             |
| User settings mode                    |          | Maintenance under severe usage condit                     |             |
| Warning mode                          |          | Normal maintenance service                                |             |
| LCD display control                   |          | Owner maintenance   | ,           |
| LCD display messages                  |          | Scheduled maintenance services                            |             |
| LCD display modes                     |          | Tire maintenance  |             |
| - ·                                   |          | 1 11 C 11141111CH411CC                                    | ····· / =4( |

| Maintenance services                          | 7-5   |
|---|-------|
| Manual shift mode                             | 5-21  |
| Mirrors                                       | 3-22  |
| Adjusting the outside rearview mirrors        | 3-25  |
| Day/night rearview mirror                     | 3-23  |
| Electric chromic mirror (ECM)                 | 3-23  |
| Folding/Unfolding the outside rearview mirror | 3-26  |
| Inside rearview mirror                        | 3-22  |
| Outside rearview mirror                       | 3-24  |
| Mobile phone charger                          | 3-150 |
| Moonroof, see sunroof                         | 3-32  |
| Multi box                                     | 3-146 |
| Multi fuse                                    | 7-56  |
| Multimedia system                             | 4-2   |
| Antenna                                       |       |
| Audio / Video / Navigation (AVN) system       | 4-5   |
| Aux, USB and iPod                             |       |
| Bluetooth® Wireless Technology hands-free     | 4-4   |
| Steering wheel audio control                  | 4-3   |
| N   |       |
| Name a maintanana amina                       |       |
| Normal maintenance service                    | 7.0   |
| For Europe                                    |       |
| Except Europe                                 | /-15  |

| Ī |   |   |
|---|---|---|
|   | ~ |   |
|   | v | J |

| Odometer                  | 3-52 |
|---------------------------|------|
| Oil (Engine)              |      |
| Outside rearview mirror   |      |
| Outside temperature gauge |      |
| Owner maintenance         |      |

| •                                       |       |
|---|-------|
|   |       |
| Paddle shifter                          | 5-23  |
| Parking assist system                   | 3-124 |
| Parking brake                           | 5-28  |
| Parking brake                           | 7-31  |
| Passenger's front air bag ON/OFF switch | 2-55  |
| Passenger's front air bag               | 2-54  |
| Plug-in hybrid mode indicator           | 3-51  |
| Position lamp position                  |       |
| Power brakes                            | 5-27  |
| Power gauge                             | 3-48  |
| Power outlet                            |       |
| Power steering                          | 3-20  |
| Power window lock button                |       |
| Pre-tensioner seat belt                 | 2-31  |
| Puddle lamp                             | 3-116 |
| <u>.</u>                                |       |

# R

| Rear center seatbelt                      | 2-31  |
|---|-------|
| Rear fog lamp                             | 3-110 |
| Rear parking assist system                | 3-121 |
| Rear seat adjustment                      | 2-13  |
| Armrest                                   | 2-16  |
| Folding the rear seat                     | 2-13  |
| Rear seat headrests                       |       |
| Adjusting the height up and down          | 2-20  |
| Rear seat warmers                         | 2-24  |
| Rear view camera                          | 3-120 |
| Recommended cold tire inflation pressures | 7-43  |
| Recommended lubricants and capacities     | 8-6   |
| Recommended SAE viscosity number          | 8-7   |
| Remote key                                | 3-4   |
| Battery replacement                       | 3-6   |
| Mechanical key                            |       |
| Removable towing hook                     |       |
| Replacement light bulb                    | 7-66  |
| Returning used vehicles                   |       |
| Rocking the vehicle                       |       |
| Rotation (Tire)                           |       |

# S

| Safety messages                         | F-5  |
|---|------|
| Scheduled maintenance services          |      |
| Seat belt warning light                 |      |
| Seat belts                              | 2-25 |
| Additional seat belt safety precautions | 2-34 |
| Care of seat belts                      | 2-36 |
| Do not lie down                         | 2-36 |
| Height adjustment                       | 2-30 |
| Keep belts clean and dry                | 2-36 |
| Lap/shoulder belt                       | 2-29 |
| One person per belt                     | 2-36 |
| Periodic inspection                     | 2-36 |
| Pre-tensioner seat belt                 | 2-31 |
| Rear center seatbelt                    | 2-31 |
| Seat belt restraint system              | 2-29 |
| Seat belt safety precautions            | 2-25 |
| Seat belt use and children              |      |
| Seat belt use and injured people        | 2-36 |
| Seat belt use during pregnancy          | 2-34 |
| Seat belt warning light                 |      |
| When to replace seat belts              | 2-37 |
| Seat warmers                            |      |
| Front                                   | 2-21 |
| Rear                                    | 2-24 |

| Seats                          | 2-4  |
|--------------------------------|------|
| Air ventilation seats          | 2-22 |
| Battery cooling duct           | 2-24 |
| Front seat adjustment          | 2-7  |
| Front seat warmers             | 2-21 |
| Headrest                       | 2-16 |
| Rear seat adjustment           | 2-13 |
| Rear seat warmers              | 2-24 |
| Safety precautions             | 2-6  |
| Shift lock system              | 5-22 |
| Shift-lock release             | 5-22 |
| Side air bags                  | 2-57 |
| Smart cruise control system    | 5-79 |
| Smart key                      | 3-7  |
| Battery replacement            | 3-10 |
| Mechanical key                 | 3-9  |
| Smooth cornering               | 5-97 |
| Snow tires                     | 5-99 |
| Spare tire                     |      |
| Compact spare tire replacement | 7-47 |
| Special driving conditions     |      |
| Driving at night               | 5-97 |
| Driving in flooded areas       | 5-98 |
| Driving in the rain            | 5-97 |
| Hazardous driving conditions   | 5-96 |
| Highway driving                | 5-98 |
| Rocking the vehicle            | 5-96 |
| Smooth cornering               | 5-97 |

| Speed limit control system                       | 5-71                                    |
|--|---|
| Speed sensing door lock                          |   |
| Speedometer                                      |   |
| SPORT mode                                       |   |
| Starting difficulties, see engine will not start |   |
| Steering wheel                                   |   |
| Electric power steering (EPS)                    |   |
| Heated steering wheel                            |   |
| Horn   |   |
| Power steering                                   |   |
| Tilt steering / Telescopic steering              |   |
| Steering wheel audio controls                    |   |
| Storage compartment                              |   |
| Center console storage                           |   |
| Glove box  |   |
| Multi box  |   |
| Sunglass holder                                  |   |
| Sunglass holder                                  |   |
| Sunroof  |   |
| Automatic reverse                                |   |
| Resetting the sunroof                            |   |
| Sliding the sunroof                              |   |
| Sunroof opening and closing                      |   |
| Sunshade   |   |
| Tilting the sunroof                              |   |
| Sunroof inside air recirculation                 |   |
| Sunvisor   |   |
| J WII T 1001                                     | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |

# T

| Tachometer                                | 3-48 |
|---|------|
| Tailgate                                  | 3-38 |
| Theft-alarm system                        | 3-17 |
| Tilt steering / Telescopic steering       | 3-21 |
| Tire chains                               |      |
| Tire load and speed capacity              | 8-5  |
| Tire Mobility Kit (TMK)                   | 6-28 |
| Tire pressure monitoring system (TPMS)    | 6-14 |
| Tire rotation                             |      |
| Tire specification and pressure label     | 8-9  |
| Tires and wheels                          | 7-42 |
| Checking tire inflation pressure          | 7-44 |
| Compact spare tire replacement            | 7-47 |
| Low aspect ratio tires                    |      |
| Recommended cold tire inflation pressures | 7-43 |
| Tire care                                 | 7-42 |
| Tire maintenance                          | 7-48 |
| Tire replacement                          | 7-46 |
| Tire rotation                             | 7-45 |
| Tire sidewall labeling                    | 7-48 |
| Tire traction                             | 7-47 |
| Wheel alignment and tire balance          | 7-46 |
| Wheel replacement                         |      |
| Towing                                    |      |
| Trailer towing                            |      |

| Trip computer                       | 2.06     |
|-------------------------------------|----------|
| Hybrid vehicle                      |          |
| Plug-in hybrid vehicle              |          |
| Turn signals                        | 3-109    |
| U                                   |          |
| User settings mode                  | 3-86, 92 |
| V                                   |          |
| Vanity mirror lamp                  | 3-116    |
| Vehicle break-in process            |          |
| Vehicle certification label         |          |
|                                     |          |
| Vehicle identification number (VIN) |          |
| Vehicle modification                |          |
| Vehicle stability management (VSM)  | 5-36     |
| Vehicle weight                      | 5-113    |
| Overloading                         |          |

# W

| Warning and indicator lights            | 3-54  |
|---|-------|
| Warning light                           | 3-54  |
| Washer fluid                            | 7-30  |
| Welcome system                          | 3-113 |
| Door handle lamp                        |       |
| Headlamp and parking lamp               |       |
| Interior lamp                           |       |
| Puddle lamp                             | 3-113 |
| Wheel alignment and tire balance        | 7-46  |
| Wheel replacement                       | 7-47  |
| Windows                                 | 3-27  |
| Power window lock switch                |       |
| Windshield defrosting and defogging     | 3-140 |
| Windshield washers                      | 3-119 |
| AUTO (Automatic) control                | 3-118 |
| Winter driving                          | 5-99  |
| Snow tires                              |       |
| Tire chains                             | 5-100 |
| Wiper blade replacement                 | 7-35  |
| Wipers and washers                      | 3-117 |
| Windshield washers                      | 3-119 |
| Windshield wipers                       | 3-117 |
| Wireless cellular phone charging system | 3-150 |
|   |       |